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The Impact of Green Plants on the Reading Environment of College Libraries

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Abstract: The library is a key learning place for many college students, but many times, due to the monotonous environment and pollution in the decoration, etc., the desire and atmosphere of students to study in the library can be greatly reduced. This article is to study the impact of green plants on the reading environment of college libraries. Taking green plants as environmental research objects, this paper uses the same space and environmental changes to use instrumental analysis. And bacteria content. The results show that in an environment with certain green plants in the same environment, the concentration of carbon dioxide decreases by 10% due to the presence of plants, the concentration of carbon monoxide decreases by 5% due to the presence of plants, the oxygen content increases by 6% due to plants, and the number of bacteria also decreases due to the presence of plants. 50%, can also help relieve visual fatigue to a certain extent. The impact of green plants on the reading environment of college libraries has many advantages. Not only can it reduce harmful gases, but it can also purify the air and beautify the environment. Therefore, libraries with green plants should be the focus of the managers of colleges and universities. And vigorous development.

1. Introduction

In modern college students, most of the learning methods are mainly self-study. According to some data, students in the school library spend about 6 to 8 hours in the library every day, but only a handful of students go to study as a school, I think there must be some reflection [1]. For example, as everyone knows, formaldehyde will exist indoors at a certain concentration for several years. Coupled with the decoration of the library, harmful gases are not easy to volatilize, which is harmful to the body. This is one of the typical problems existing in college libraries now [2]. Secondly, let's talk about the ratio of carbon dioxide and oxygen. The carbon dioxide produced by people's

breathing is generally relatively low in air circulation [3]. Therefore, when the flow of people is large, the concentration of carbon dioxide will be high. Due to the low space circulation, the oxygen content is also very high. Decreased, people staying in it for a long time can cause people to breathe quickly and cause headaches, and the body's sweat excretion and epidermal shedding caused by metabolism will produce bacteria [4].

Because the research on the impact of green plants on the library is more important, many research teams have studied the impact of green plants on the library, and have achieved good results. For example, from an environmental perspective, by comparing the green plants Research on the impact of the library has made great achievements [5-6]. Put some green plants in the reading area. According to their own characteristics, green plants can play a role in purifying the air and have a certain sterilizing effect. Looking at green plants for a long time will have a positive effect on people's emotions and health, he will excite the cerebral cortex, and then affect people's physical state [7]. According to some tests, about 1 hectare of forest can produce an average of 750 kg of oxygen in different seasons, and can also absorb 900 kg of carbon dioxide [8]. If we say that an adult man needs about 0.7 kilograms of oxygen for breathing and emits about 0.9 kilograms of carbon dioxide for comparison, the average person needs 11 square meters of wooded area to reduce the amount of breath produced by each person. carbon dioxide. Provide the oxygen that everyone needs in life [9].

D. Carroll did relevant research on the control of carbon dioxide smoke concentration in the impact of green plants on the environment of university libraries [10-11]. Zhao's scientific research results made us fully understand the development process of photosynthesis of various plants, indicating that plants absorb carbon dioxide efficiently, and the source of oxygen, indicating the difference between the presence and absence of plants [12]. Cindy's research shows that green plants also have a certain digestion, absorption, and decomposition effect on indoor radiation, especially this cactus, which is easy for the human body to absorb and effectively dissolve the radiation electromagnetic fields and toxins in radiation from indoor and outdoor environments, reducing indoor and outdoor radiation pollution. Good for human health [13]. Kathleen's research results show that cyan and pale yellow-green can give everyone a sense of coolness and calmness. At the same time, the turquoise color can not only effectively absorb the blue ultraviolet rays which are harmful to people's eyes in the reflected strong light, but also can effectively reduce the blue glare caused by the reflected strong light to human eyes [14-15]. XW's research shows that due to the increasing development of society, human beings are exploring the evolution and development of green connotations, and have transcended their attributes and connotations. Green refers not only to the concept of sustainable development and the protection of the environment, but also to the advocacy of natural resources [16].

The main research content of this article is roughly divided into five parts. The first part is a brief introduction to the environmental impact of green plants on university libraries, and the purpose and significance of the research are explained. The second part briefly introduces the methods used in this paper. This article mainly uses chromatography, Austrian gas analysis and other methods. The third part is that the specific research contents of this article are roughly as follows: low impact of carbon dioxide radiation on the human body, high oxygen concentration is conducive to readers staying in it for a long time, alleviating eye fatigue and pleasant psychology, and killing some common bacteria. In the fourth part, the paper analyzes the data collected through various channels, and mainly analyzes the environmental impact of green plants on university libraries. The fifth part is the conclusion, the final discussion and explanation of the experimental results.

2. Proposed Method

2.1. Principles of Gas Composition Analysis

There are many technical methods for environmental analysis. Each analysis method should have a certain scope of technical application and research objects. Analytical methods can be generally divided into four categories: electrochemical physical analysis, optical physical analysis, mass spectrochemical analysis, and chromatographic chemical analysis. Each category can be divided according to the principles of chemical analysis methods used and the equipment for several species. Generally speaking, it is an instrument method. The instrument property analysis method is mainly an analysis method using a more specific substance instrument. It is based on the chemical physics of a special substance or the property analysis in physical chemistry as a theoretical basis. Analytical methods. The trace analysis method has the following major characteristics: First, the sensitivity is high, which is suitable for the analysis of trace chemical components such as acidic traces, traces and neutral excesses. Selective. Many general instrument component analysis methods can be manually selected or directly adjusted to determine the time conditions for the measurement, so that when the coexisting instrument components are measured, there is no need to cause any interference between them. Simple operation, fast analysis and processing speed, easy to quickly realize process automation [17]. Specifically, purely instrumental chemical analysis is an experimental chemical phenomenon that uses an instrument to directly or indirectly accurately characterize the various chemical characteristics of a specific substance (such as chemical physical, chemical, physiochemical properties, etc.). An analysis of instrument probe elements or sensors, amplifiers, analyzers, or converters to form a kind of analysis about the main component, content, distribution, or organizational structure of a substance that can be directly and intuitively perceived by people. method. In other words, the method of instrument physical analysis is a method that uses the basic principles of various physical disciplines to use quantum electronics, optics, precision instruments, and advanced scientific technologies such as manufacturing, vacuum, and computers to detect chemical substances and chemical physical properties Analytical method. Therefore, the discipline of electronic instrument measurement and analysis is a highly comprehensive branch of modern science and technology, which mainly reflects the highly intersecting of the two disciplines and the highly organic combination of science and modern technology.

The instrument method is to test the gas composition using a flow analysis instrument that measures the gas composition. In many production processes, especially in some industrial production control processes where there are many chemical reactions, it is often not enough to perform automatic control based only on some physical and chemical parameters such as reaction temperature, pressure, and flow. Due to the great variety of gases in the analytes and the variety of principles for the gases being analyzed, there are many types of gas temperature analyzer products. Commonly used equipment is electromagnetic thermal conductivity laser gas electronic analyzer, electrochemical laser gas electronic analyzer and laser infrared electromagnetic absorption gas analyzer [18-19].

A gas analysis physical instrument designed to work based on the gas in different gas components having different selective and absorbable physical characteristics for light and infrared radiation at different time wavelengths. Measuring the absorption gas spectral intensity of this object can be used to determine the type of gas absorption detected; measuring this absorption gas intensity spectrum can be used to determine the absorption concentration of the detected object on the gas. The infrared liquid analyzer has a wide range of main application areas. It can not only

directly analyze components in water and gas, but also directly analyze components in liquid solutions. Instructions can also form an adjustment system. The formula for analyzing gas is as follows:

$$A = -K g \frac{I}{I_0} \tag{1}$$

$$A = -L g' \tag{2}$$

$$A = E C \tag{3}$$

A is the absorbance, I am the transmitted light intensity, T is the light transmittance, E is the light absorption coefficient, C is the concentration of the measured gas, and L is the gas density.

After the gas in the gas measurement laboratory is directly introduced into the gas measurement laboratory through gas emission, the infrared light having a wavelength of a characteristic infrared emission light path of the gas directly introduced in the gas measurement laboratory is introduced into the gas emission absorption. Therefore, we can reduce the luminous flux by enabling us to directly enter the obtained gas through the special emission light path that uses gas emission measurement to enter the laboratory. The infrared emission channel cannot receive all the gas that is introduced into the measurement air chamber. The higher the measured value of the concentration of the luminous flux in the gas, the less the luminous flux calculated after entering when the transmitted infrared radiation can be used to simultaneously receive the radiant gas from the other gas chamber; The luminous flux content and its concentration value of the radiant gas transmitted through the infrared reference radiation discharge chamber are also constant. The calculated luminous flux when the transmitted infrared radiation can be used to receive the radiant gas from another gas cell at the same time after entering. It must be [15]. Therefore, the higher the light concentration of the gas in the p
 24 passive observation room, the greater the difference in gas luminous flux concentration between the reference measurement laboratory and the reference comparison measurement room. The value of this periodic luminous flux difference usually projects light to the entire infrared microwave receiver and air chamber in a certain long-period microwave vibration amplitude mode. The received gas chamber is separated into two halves by a layer of a metal gas film with a thickness of several micrometers. There is a relatively dense absorption gas of the test component to be tested in the sealed portion of the indoor film. Outside the range, the short-wave infrared rays injected by the gas can be completely absorbed, so that the pulsating infrared light flux can be converted into a periodic fluctuation of the gas temperature, and the gas temperature can be periodically changed according to the control of the gas pressure equations. It is converted into a periodic change in gas pressure, and then detected by a new capacitive pressure sensor. After microwave amplification and heat treatment, the concentration of the component to be measured is calculated according to the instructions [16]. In addition to the capacitive interference sensor for use, it is also equipped with a quantum solid infrared interference sensor that can directly detect solid infrared, and can use infrared interference filters to directly select the interference wavelength and directly match various adjustable The laser element is used as a light source to form a brand new omnidirectional solid-state infrared interference gas laser analyzer. This type of radiation analyzer can easily complete accurate measurement of gas radiation concentration using only a reflected light source, a radiation measurement laboratory, and a small infrared radiation sensor. In addition, if a radiation filter disc with multiple different frequency wavelengths is used at the same time, it is possible to accurately measure the radiation concentrations of various inert gases

in a multi-component inert gas system at the same time.

$$W_{H/2} = 2.355\sigma \tag{4}$$

It is used to analyze and evaluate the chemical properties of pharmaceutical molecular chromatographic columns. Chromatographic separation in ion exchange utilizes the different characteristics of the chemical capabilities of the stationary phase and the two stationary phases that can undergo ion exchange to quickly achieve chromatographic separation. The stationary phase of ion exchange equilibrium chemical chromatography is generally a white resin after ion exchange. There are usually many active centers in the resin molecular structure that can be ionized directly through ion exchange. Some of these resin molecules will be separated when we perform the separation. The central ion exchange flow will directly exchange ions with these active centers to form an ion exchange equilibrium, so that the resin stationary phase in this ion exchange flow and the stationary phase in equilibrium chromatography are directly divided to form an ion exchange distribution. [17]. The inherent ionic mobile phase of the stationary phase is a set of separated mobile phases that separate between the ions and an inherent mobile phase. The ionic contention process between the inherent mobile ions in it can be regarded as fixing the inherent ions in a mobile ion phase. As the ion center of the exchanger, with the continuous movement of the inherent ions of an inherent mobile phase, ion movements continue to occur, and eventually ion separation can be achieved. Peak width (W): When a chromatogram passes a point, it meets a basic inflection point on both sides of the chromatographic peak. It is also called the basic two tangents. The intercept and point width on this basic two tangents are also called the peak width. The width of a point is also called the intercept width on this basic tangent, called the peak width, or the width is called the width on the baseline. There are a variety of formulas as follows:

$$W=4\sigma \tag{5}$$

$$W=1.699W_{h/2} \tag{6}$$

Peak height (h): The vertical distance from the peak of the component chromatogram to the time axis is called the peak height. The unit is usually millivolts (mV), which is used to determine the content of the components. It refers to a separation process in which the molecular material taken out after the atomic substance to be separated is separated with two molecules moves and the electrons are distributed and balanced between the two material stationary phases and the two molecular mobile phases. Different materials separate molecular substances. The distribution and balance of the mobile electrons between the two phases may be different, which may result in different electronic accelerations that cause the two molecules to move in equilibrium with the mobile phases of the two substances. Equilibrium movement, the molecular components of different separated substances in the process of detaching the mixture from the molecule may also be balanced and separated from each other based on a new stationary phase. The analysis method is expressed by the formula:

$$C_X = f \times \frac{A_X}{A_s / C_s} \tag{7}$$

The detector system is a new basic device brought by modern gas chromatographic technology to modern chromatographic quantitative analysis. In modern classic column gas chromatography and small-scale thin-layer gas chromatography, the material separation and chromatographic

detection of each sample are performed simultaneously and separately. Modern gas chromatography has fully realized the perfect combination of sample separation and chromatographic detection. Gas chromatography is widely used for the quantitative analysis of small components and high molecular weight complex chemical substances. The total number of colonies in the air is determined by the plate sedimentation method, and the calculation formula is the number of bacteria:

$$(CFU)/\ m3=N\times100/A\times5/T\times1000/10=50000N/AT \quad (8)$$

Among them: A: plate area (cm2); T: plate exposure time (min); N: average plate colony number (CFU).

2.2. Green Plants Change Environment Detection

There are great differences between indoor and outdoor environments. The selection of indoor green plants should adhere to the following principles: First, the principle of regional development. Due to the vast size of our country, the natural geoclimatic and zonal space spans a lot, and the geographical and natural climatic conditions where the national libraries are located are different, and the natural climate, physics, and geography and environmental conditions required by them are quite different. The cultivation and breeding of new varieties of green plants and the cultivation and maintenance of them are severely constrained by the climatic geography and natural climatic environmental conditions of our museum [18]. Second, the economic principle. The indoor greening of the library does not necessarily require the selection of high-end and precious plant varieties, general plants can be, but also the simple and convenient maintenance of green plants, as well as the durability of growth, should be done as little as possible to do major things to save Economic investment. Third, the principle of subordination. The main body in the interior of the university library is not green plants, but documents, information, furniture and readers. Green plants are only to decorate and modify the indoor environment. They should be simple, correct, beautiful, decent and coordinated [19]. Fourth, the principle of space suitability. Except for office buildings, most of the university library buildings are designed with large open rooms according to different functions, including halls, reading rooms, multimedia electronic reading rooms, bookstores, conference rooms, borrowing halls, lecture halls and pedestrian walkways. Greening can be carried out, but it should be adapted to local conditions, that is, the design, layout and reasonable selection of green plant species should be based on the size of each relatively independent building space. Fifth, the principle of ecological development. According to the functional functions of the indoor main building of the university public library and the natural ecological protection function that the green plants should have, green plants need to be selected. For example, if you use multimedia newspapers, e-books and reading rooms, you should try to select plants to effectively absorb the indoor air. In addition to the toxic, harmful substances and green plants that can effectively inhibit harmful gas bacteria, at the same time, some green plants that can effectively absorb outdoor electromagnetic radiation should be selected at the same time. Sixth, the principle of formal aesthetics. As a natural subject protecting nature and its ecological environment, green plant buildings are an important foundation for the natural beauty of colleges and universities. The green plants are fully and reasonably introduced into the main building of the university student library to protect and beautify the interior environment of the building. It has the rich spiritual connotation of the green culture of the university society, is an organic and natural fusion of the natural beauty of the university and the humanistic beauty of the society, and is a great improvement on the quality of the indoor environment artificial beauty and micro-plant ecological beauty of the main building of

the university student library [20]. However, the design rules for the beauty of the plant form in the overall space of the unit building should be strictly followed. Combined with the overall space use conditions of the indoor unit building, the green flora is used as the design subject, and various bonsai flowers are used for decoration. The mix should not be too much, the variety mix should not tend to be too mixed, and the shape of the plants should also be appropriate.

For example, the millennium tree camphor is effective in suppressing the large amount of harmful substances released from the wood in the body. In addition, it also has very effective human air purifying agents and bactericidal effects on green yellow flower green leaves and red palm leaves and paraxylene and active formaldehyde in them. Frequent spraying of water on these evergreen plants not only can effectively promote the foliage to remain green, but it is also possible to effectively clean the stomata of each part of the foliage of these plants. Boston fern can efficiently absorb about 20 micrograms of active precursor formaldehyde at about one hour per second, so it is widely misunderstood that it is also the most effective active formaldehyde derivative "purifier". People who deal with indoor smoking, paint and coating industries all day long, or friends around them, and some young people who specifically prohibit indoor smoking because of their preferences, should place at least a large pot of fern in your workplace. Plants. The ecological performance of such vines such as Focus Benjamin shows many excellent ecological characteristics. It can not only effectively increase the humidity of the air in our room, but also benefit our facial skin and our breathing. At the same time, it can effectively absorb a large amount of formaldehyde, xylene and other ammonia and effectively purify turbid indoor air.

3. Experiments

3.1. Experimental Data Processing

In the course of the experiment, there is a large amount of production management data to be processed, and there must be errors in these data. It is also very important to handle the errors appropriately. The error processing and analysis of the original data is quite necessary, otherwise it will affect the positive and negative analysis of these experimental data. System error, random error and gross error are the main forms of experimental data error. Among them, the error caused by random factors is called random error, which is characterized by irregular signs and absolute values, but it will be normally distributed with the continuous increase of the number of experiments. Because in the statistical data, due to artificial carelessness, or changes in environmental conditions, instability of the instrument and other factors, the error that causes the observation error to not conform to a certain statistical distribution law is called measurement error. System error is the error caused by the measurement instrument, the change of the measurement reference and the influence of external conditions. To get the data, the first thing to do is to remove the effects of gross errors and system errors to ensure the accuracy of the next step.

Major scholars at home and abroad use the least two-digit multiplication to optimize the gross error of the system monitoring data. The least two-digit multiplication explicitly assumes that the observation error value contains only accidental errors, Considering that a dynamic measurement target has two characteristics of continuity, the credibility of the measurement value, that is, the degree to which the measurement value can be affirmed, can be considered according to the continuity, progressiveness, and rationality of the measurement value. A high degree of confidence indicates that the uncertainty of the measured value is small; a low degree of confidence indicates that the uncertainty of the measured value is high. To describe the credibility of the data, we can use the theory of unascertained mathematics. The following uses the method of unascertained

mathematics to analyze the original data and handle the error.

3.2. Experimental Content

(1) Experimental equipment

Collection gas source instrument, column reaction instrument, oven control board, detector and recorder

(2) Experimental principle

The technical director of the gas source analysis center provides users with various gas phases and carrier gases required for the materials used for chromatographic analysis, that is, mobile phases of various gas phases. The materials of the carrier gas phase generally need to be purified and insulated by various air phases. And constant pressure air purification process. Several types of packed column chromatography columns for gas chromatography generally have a very small diameter, but their length is generally not very long. According to the internal structure of the chromatographic column, it can be roughly divided into packed columns with capillary columns and capillary columns. The filling column is relatively short and thick. The diameter is generally about 5 mm and the length are between 2 and 3 mm. The filler material of the shell column is generally mainly a layer of tempered stainless steel. The internal filler can directly fill the external stationary phase or the interior of the filler. Packing; capillary column is welded by a layer of tempered glass or pure quartz composite material, the inner diameter is unlikely to be less than 0.5 mm, and the length is generally between tens of meters to one hundred meters. The packing can be filled inside or outside the column. Cloth external packing or internal packing drawing liquid phase stationary phase. The oven experiment is an important device to protect the temperature between the gas chromatography column and the temperature control column. In various gas chromatography, the column temperature often has a large impact on the maximum separation chromatographic effect. Temperature control is often only necessary to achieve the highest separation and chromatographic results, so the oven experiment plays a very important role.

(3) Experimental steps

First go to a house similar to the library environment, let the room stand for a period of time, and then place the various instruments. First test the air composition analysis of the room without green plants, and then place some green plants in the same room. Then, after waiting for 48 hours, re-detect the changes in the content of various gases in the air, and then compare the data to learn that the impact of green plants on the environment is shown in Table 1.

Table 1. Changes in air composition of green plants

Group	No plant	There are plants	Difference
Carbon dioxide	5	125.5	0.12
Carbon monoxide	5	10.1	1.48
Oxygen	5	140.1	0.11

According to the above data, in the specific environment with or without green plants, the oxygen concentration increased by 2%, the carbon dioxide concentration decreased by 3%, and the carbon monoxide concentration decreased by 2%. The environment with green plants is more suitable for people to stay in it for a long time.

4. Discussion

4.1. Comparative Analysis of Air Environment Detection Methods and Carbon Dioxide

At present, the more widely used methods for air composition analysis methods are mass spectrometry, chromatography, chemical electrolysis, and Austrian gas analysis. Bacterial analysis methods are quantitative airborne plankton sampling, sedimentation bacteria, and surface sampling. Method, corresponding to three major indicators of plankton, sediment bacteria, surface microorganisms. Each extraction method has its advantages and limitations. For inspection workers, the choice of extraction method depends more on its extraction efficiency and accuracy. Here, for the analysis of air components, we choose chromatography and Austrian gas analysis. For bacterial testing, we choose the airborne plankton sampling method. Changes in the number of bacteria in different test areas with and without bacteria, as shown in Table 2:

Table 2. Change in index value

Group	No plant	There are plants	Difference
Carbon dioxide	5	125.5	0.12
Carbon monoxide	5	10.1	1.48
Oxygen	5	140.1	0.11

With regard to the test of the air content component, the results of these methods are compared, and the extraction conditions of different extraction methods are optimized to meet the detection conditions of different laboratories. One test method performs multiple tests, compares the obtained data, and reflects the efficiency and accuracy of the method. As shown in Figure 1:

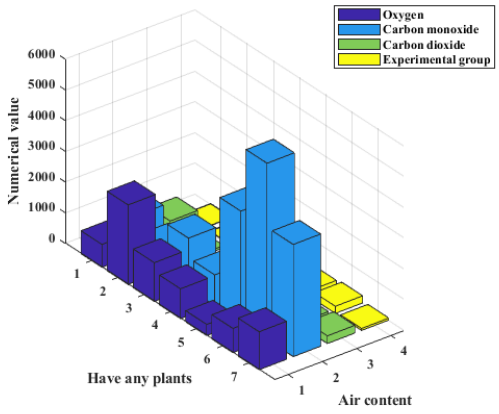

Figure 1. Chromatographic experiments of plant changes to air

It can be seen from the data in Figure 1 that in the chromatographic analysis method, the data of each group has a small difference, and the detection speed is very fast, and the separation analysis method has high separation efficiency. In recent years, a highly sensitive and selective detector has been adopted, which makes it have the advantages of high analytical sensitivity, which can be specific to ug, and a wide range of applications. However, its shortcomings are high cost and high equipment costs. Thousand yuan. If only one or two experiments, then the cost is relatively high.

The Austrian gas analysis and analysis method uses a chemical reaction gas detection method.

The chemical reaction between the gas and some substances is used to verify the amount of contained gas. The multiple verifications are shown in Figure 2:

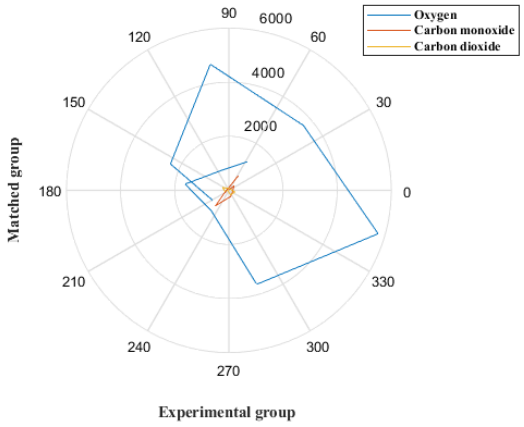

Figure 2. Austrian gas analysis of plant changes to air

From the data in Figure 2, it can be seen that the method of Austrian gas analysis is to use various liquids to absorb substances with different components in the gas. Generally, 40% concentration of sodium hydroxide is used to absorb the samples taken. Carbon dioxide; use potassium gallate solution to absorb oxygen in the sample; use ammoniated cuprous chloride solution to absorb carbon monoxide in the sample. Then calculate the content of each component based on the change in sample volume before and after absorption.

The above data is expressed in the same way, and then the obtained data is compared and processed, so as to know the advantages, disadvantages, accuracy, and efficiency of various data in the two data, as shown in Figure 3 below:

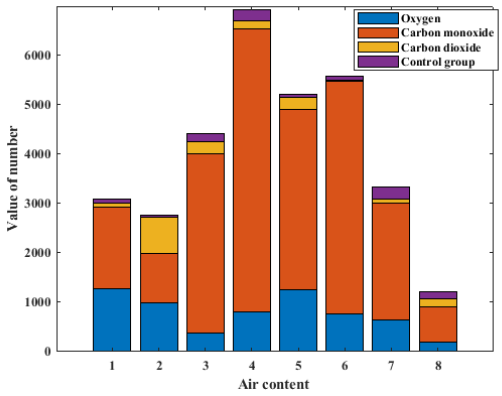

Figure 3. Plant changes to carbon dioxide, etc.

From the data in Figure 3, it can be seen that the Austrian gas analysis data is not accurate enough. The data deviation of the Austrian gas analysis method is relatively large compared to the chromatographic method. The single test cost is low, but if the test is performed many times, most of them are single-use, so the test cost will increase. At this time, it is better to choose chromatographic analysis.

From the data in the above figure, we can know that in the environment with plants, carbon dioxide and carbon monoxide will decrease, and the oxygen content will increase, which is more

suitable for the environment of college reading libraries, so the college library environment with plants will be better. Validation showed that the carbon dioxide concentration of some plants decreased by 10% year-on-year, the concentration of carbon monoxide decreased by 5% year-on-year, and the oxygen increased by 6% year-on-year.

4.2. Analysis of the Effects of Plants on the Environment Bacteria

In the bacterial inspection, we choose the airborne plankton sampling method and sedimentation bacteria method. The simplest method for detecting bacteria is the sedimentation bacteria method. The principle of the sedimentation method for comparing data is to use dust particles or droplets containing microorganisms to naturally fall to the surface of the exposed culture medium due to gravity for collection; in this way, you can choose different Position, and then take data separately, so that the information obtained will be more accurate in a constant temperature culture in an incubator for a certain period of time, and finally count the colonies after waiting for bacteria to grow out.

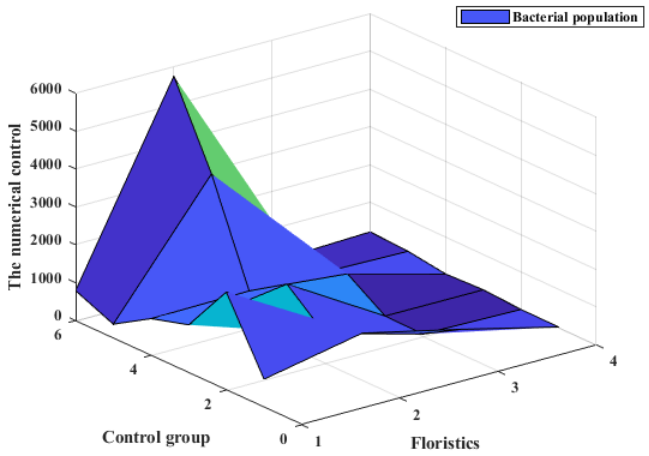

Figure 4. Plant changes to air bacteria

As shown in Figure 4, different plants also have different treatment results for different bacteria. Many plants have special characteristics for some bacteria. Therefore, you can choose to plant some of the bacteria that have the greatest impact on the human body in the indoor environment. Different types of plants to achieve optimal treatment of bacteria in the air.

There is a significant change in the number of bacteria in the air in the presence or absence of plants in the sedimentation method. The absence of plants is 50,000 N / AT and the presence of plants is 30,000 N / AT. The number of obvious bacteria in the air is reduced, which can better protect people from invading bacteria. It suits people's strengths and meets the needs of libraries. The test results show that the instrument detection method has the advantages of fast, simple, and accurate. It can accurately detect the environment and determine whether there are changes in the impact of plants on the environment. In the environment where plants are present, the number of bacteria will be less.

5. Conclusion

(1) This article mainly introduces that the library is now a place for college students to focus on

learning, and that there are certain problems in the library environment. In many ways, it is said that environmental problems have had a greater impact on the learning of college students. The library environment needs to be valued, and some "skills" of green plants are more in line with the characteristics of dealing with these environmental problems. It is necessary to study the changes in the impact of green plants on the library environment.

(2) The experimental principle of this article mainly talks about the following aspects: Environmental change mainly refers to changes in the content of some common air components that have a greater impact on the human body. Air environment monitoring is a combination of multiple technologies. Instrument to change some data into information that people can understand. It belongs to one of the areas where the country is vigorously researching and developing.

(3) Through experiments, we can know that in the presence or absence of plants, the concentration of carbon dioxide decreases by 10% due to the presence of plants, the concentration of carbon monoxide decreases by 5% due to the presence of plants, the oxygen content increases by 6% due to plants, and the number of bacteria also depends on plants. There is a 50% decrease. Among them, the chromatographic method has high efficiency in detecting gas components and accurate data, which indicates that the data of the instrument method is more representative. The research on the impact of green plants on the environment of college libraries shows the direction for the development of college libraries, and makes the learning of college students more comfortable and safer.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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