The stability of rainfall conditions based on sensor networks and the effect of psychological intervention for patients with urban anxiety disorder

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Abstract
As a new type of intelligent monitoring network, the wireless sensor network of the rapidly growing intelligent monitoring network, in order to study the wireless sensor network, many technical personnel of the relevant technical level analyze and think from multiple angles, combining the network world and the network application center. In the technical research stage, combined with the experience of former researchers, this article combines a variety of algorithms, including wireless sensor network (WSN) layer routing protocols, such as BP neural network and other new applications, and proposes a very novel algorithm, which is similar to the algorithm of BP neural network. It also combined many new calculation methods and found that psychological cues have a strong effect in the study of many patients with anxiety disorders in the city. This article mainly discusses the rainfall and soil quality in the rainfall environment, including saturated homogeneous soil, saturated heterogeneous soil, and unsaturated heterogeneous soil, whether the slope under different rainfall environments and the seepage field and stress field are combined smoothly. Under different rainfall environments, there is a force in the opposite direction at the top of the slope, and then, when the water pressure decreases, the direction of the slope top force is the positive direction; under the same rainfall environment and the same time environment, the force on the slope foot is greater than the force on the top of the slope; this paper combines the data algorithm with the line sensor network technology to study the stability of contemporary rainfall conditions and the psychological intervention of patients with urban anxiety.

Keywords Sensor network · Stability of rainfall conditions · Urban anxiety · Psychological intervention

Introduction
With the rapid development of information technology, people's lifestyles have also undergone great changes. Wireless sensor network is a new type of rapidly developing network equipment (Bhatia 1983). Wireless sensor network (WSN) can collect a lot of important data needed by humans and can also process the data after the analysis results and then help each other to complete the transmission process and transmit the information and analysis results to the final destination. First, the research content must be effectively analyzed. It is necessary to analyze the current status information of this fusion technology such as the way it exists and the scope of its application, and it is also necessary to understand its basic concepts, basic structure, appearance characteristics, technical means, etc., which can be studied, and summarize the advantages of large data compatibility in the modern metropolitan environment. People know that this is a common disease characteristic of cities through showing a kind of anxiety (Black et al. 2003). It is also a kind of psychosis due to mental disturbance in the brain. It is characterized by slow onset (Cai 2007). Nowadays, in cities and villages in China, the development is also so rapid (Cai et al. 2015). With the emergence of more and more diseases such as social pressure, with the increase of the population, the competition has become more and more serious, and people's psychological conditions have gradually received attention, and the outbreak rate of this disease has also increased (Carter and Moss...
We call this disease an urban and rural anxiety disorder (Chen et al. 2017a). The main manifestation is physical discomfort such as chest tightness, shortness of breath, nervousness, nausea, and other uncomfortable symptoms (Chen et al. 2017b). The causes of these diseases may be related to the pressure in work and the complex and trivial aspects of life. It is closely related (Dai et al. 2017). This disease that people are suffering from is more painful than everything they encounter in life, so people feel pain and cannot get rid of it (Darby et al. 2001). As a result, their quality of life gradually declines, and the mental torture is more than that. The torture encountered in reality is much greater. The sleep quality of patients with anxiety disorders in urban and rural areas is greatly impaired, and their physical and mental health is also greatly affected, which affects the social function analysis of patients. Most depressed patients at this stage will restrain themselves and carry out psychological interventions when they discover that they are suffering from an illness (Davis et al. 2002). Symptoms can be gradually relieved while maintaining a normal life. Urban anxiety patients cannot be cured through personal control (Dong et al. 2009). They must be treated through psychological intervention therapy in a professional and systematic way. In the development of modern medical methods, there are many types of clinical treatments for urban anxiety. Psychological intervention therapy has a significant effect in treatment as an effective way. At present, many researchers have studied a lot of studies on whether there is a relationship between rainfall conditions and mountain slopes and through experiments to change the rainfall environment to see the stability of the slope. It is concluded that the cohesion and the angle of internal friction are in a decreasing relationship with the water content. The rainfall environment has changed the slope quality of the landslide. A lot of changes have occurred under the action of various factors, and there are also subsequent shortcomings (Du et al. 2017).

Materials and methods

Overview of the study area

This article selected two hillsides. The soil on this slope is mixed soil, composed of multiple component soils, including clay, wind-enhanced soil, and soil blown by a stroke. The clay is 10 m thick, and the wind-enhanced soil is thick. It is 9 m, and the thickness of the soil blown by the stroke is 60 m (Fan et al. 2009). The area we surveyed belongs to the subtropical monsoon climate, where the four seasons have obvious temperature, the winter is severely cold, and the summer is dry. The overall annual average temperature reaches 16 °C. The annual rainfall is 1174.7 mm (Fedo 2003). Summer and autumn rainfall is the highest. There is no detection in the studied area. The water level indicates that the detection depth of drilling cannot reach the depth of the groundwater level (Geng et al. 2010).

Research methods

Sensor network

The sensor has received widespread attention and enthusiasm in the society. It has the advantages of energy saving, small size, and low price for short-distance transmission of information. The connection of each node finally forms a dynamic network shape (Hou et al. 2011). The role of these special meshes is to process and analyze information, and then, the sensor transmits the information through the base (Hu et al. 2013). When the sensor is designed, there is no specific function of positioning, so the node does not know where it is, and it needs to build its own network system here. Wireless sensor networks are common in chemistry, geographic environment, and military fields, and they are also closely related in people’s lives (Jian et al. 2005).

The working process of the sensor is as follows: first, use the sensor equipment to connect the required information through the converter to connect the numbers and information together and then convert; the second step is that other parts of the sensor will play the role of the processor, and finally, the sensor is processed. The subsequent data results are stored together, and the sensor can also perform data processing in various aspects. In the final stage, the module will also receive data transmitted from other nodes for processing. Finally, when the node processing is completed, the sensor will send the final result to the place where it is needed, and the network supervision center will take care of whether the series of operations are standardized. In the entire transmission of information, the energy required is provided by the sensor itself.

Stability analysis of rainfall conditions

The effect of the forces on both sides of the slope is considered by both internal and external factors. The key investigation method is to investigate when the internal and external factors received by the slope are stable, and the lower half of the slope bears force which is called hydrodynamic pressure, which means:

$$ D = V \gamma_w I $$

Among them, the hydrodynamic pressure is the direction of the water flow. The analysis is carried out under the condition of the slope unchanged. Because the direction of the water flow is changing, the strength of the water cannot be measured, so the water level is below the ground; the slope has seepage liquid; we use the density method to calculate the
sliding pressure; the calculation method of the anti-sliding force is calculated by the density of the object. Therefore, the key point is that the stability of the slope can only be beneficial to our investigation and calculation if it is stabilized.

The unstable surface of the soil with sandy soil on the slope is easy to fall off; the stability factor:

\[ F_s = \frac{\tan \phi}{\tan \alpha} \]  

Among them is the friction angle, which is the included angle. It can be seen from formula 2 that the stability of sandy soil has nothing to do with the weight of the soil. When the soil is under water pressure, the anti-sliding stability safety coefficient of sandy soil slope:

\[ F_s = \frac{\gamma}{\gamma_{sat}} \frac{\tan \phi}{\tan \alpha} \]  

It can be seen from formula 3 that when the soil is under water pressure, the safety factor of sandy soil’s relative slope stability is related to the bulk density of the soil. The stability of the sandy soil is related to the weight of the soil.

The anti-stability strength of saturated soil:

\[ \tau_f' = c' + (\sigma_f-u_a)' \tan \phi' \]  

The specific results of stress, strain, and stability coefficient under the coupling action of seepage force and stress field under simulated rainfall environment are shown in Table 1.

In the analysis expression, the three index values of displacement \( U \), load \( P \), and energy \( W \) are used as final data. The results are shown in Table 2.

Calculation expression of compressive strength of unsaturated soil:

\[ \tau_{ff}' = c' + (\sigma_f-u_a)' \tan \phi' + (u_a-u)' \tan \phi \]  

**Experimental design**

As shown in Fig. 1, the slope investigated in this paper is a mixture of various soils. The thickness of the clay soil is about 10.0 m, the thickness of the strongly weathered mudstone is about 9 m, and the thickness of the moderately weathered mudstone is about 60 m. Natural disasters, such as landslides and the outflow of a large number of mudslides, have not occurred.

The maximum height of the profile in Fig. 1 is 164 m, and the length is about 320 m. The broken line in Fig. 1 shows the upper slope is relatively stable at the ABC stage and is not easy to change. However, the slope CDE is easy to collapse after raining, so their stability is analyzed (Table 3). The slope is the CDE section, which is more stable than the other slopes.

This paper selects the section in Fig. 1 as the research object, the mesh is divided into 1 m, and the triangle element is used. The school load in the CD section of the slope stability analysis is 10 KN/m. The two sides of the slope are horizontally restrained, the bottom is horizontal and vertical, and the slope is unconstrained. The detailed table is shown in Table 4.

In the ABCDE section, light rain, moderate rain, and heavy rain are applied, and the slope stability under the conditions of continuous rainfall for 8 h and 62 h after the rain stops.

**Results**

**Stability results under different rainfall conditions**

It can be seen from Fig. 2 that the pore water pressure is positive due to rainfall on the top of the slope.

According to Fig. 3, the top of the slope was recharged in time due to the rainfall on the top of the slope. After the rainfall stopped, the pore water pressure continued to dissipate, the matrix suction decreased, and the shear stress gradually increased.

| Single-width rainfall | Stress at point 1 | Stress at point 2 | Stress at point 3 | Stress at point 4 | Stress at point 5 | Stress at point 6 | Safety factor |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------|
| 0                     | 101.40           | 76.05            | 50.70            | 50.70            | 139.43           | 139.43           | 1.523        |
| 0.05                  | 130.40           | 116.39           | 81.59            | 84.39            | 230.666          | 220.73           | 1.351        |
| 0.10                  | 130.69           | 16.78            | 81.98            | 84.88            | 231.06           | 221.03           | 1.246        |
| 0.15                  | 131.08           | 117.17           | 82.47            | 85.27            | 231.45           | 221.42           | 1.082        |
| 0.15544               | 130.89           | 117.27           | 82.47            | 85.37            | 231.55           | 221.42           | 1.082        |
| 0.20                  | 130.89           | 117.27           | 82.86            | 85.76            | 231.84           | 221.71           | 1.022        |
| 0.25                  | 131.28           | 117.96           | 83.35            | 86.25            | 233.23           | 222.10           | 0.915        |
| 0.30                  | 131.57           | 118.41           | 83.84            | 86.65            | 233.62           | 232.62           | 0.852        |
| 0.40                  | 132.06           | 119.27           | 84.72            | 87.63            | 233.41           | 233.41           | 0.654        |
Table 2  The soil quality of saturated homogeneous soil changes with the change of rainfall

| Single-width rainfall | Strain at point 1 | Strain at point 2 | Strain at point 3 | Strain at point 4 | Strain at point 5 | Strain at point 6 |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 0                     | 0.01014          | 0.00761          | 0.00507          | 0.00507          | 0.01394          | 0.01394          |
| 0.05                  | 0.01304          | 0.01164          | 0.00816          | 0.00844          | 0.02307          | 0.02270          |
| 0.1                   | 0.01307          | 0.01168          | 0.00820          | 0.00849          | 0.02311          | 0.02210          |
| 0.15                  | 0.01309          | 0.01172          | 0.00825          | 0.00853          | 0.02314          | 0.02214          |
| 0.15544               | 0.01309          | 0.01173          | 0.00825          | 0.00854          | 0.02315          | 0.02214          |
| 0.20                  | 0.01311          | 0.01176          | 0.00829          | 0.00858          | 0.02318          | 0.02217          |
| 0.25                  | 0.01313          | 0.01180          | 0.00833          | 0.00863          | 0.02322          | 0.02221          |
| 0.30                  | 0.01315          | 0.01184          | 0.00838          | 0.00866          | 0.02326          | 0.02224          |
| 0.40                  | 0.01321          | 0.01193          | 0.00847          | 0.00876          | 0.02329          | 0.02231          |

Under light rain conditions, the slope top shear stress gradually decreases at $t = 14$ h after the rainfall stops; under moderate rain conditions, the slope top shear stress begins to decrease at $t = 18$ h after the rainfall stops, while heavy rain and heavy rain are analyzed. The shear stress has been increasing over time. Comparing the slope top shear stress under light rain, moderate rain, and heavy rain, it can be seen that the greater the rainfall, the greater the slope top shear stress.

In combination with Fig. 4, it takes a certain time for the water to be recharged from the top of the slope and the surface of the slope by rainfall. The pore water pressure appears negative at the beginning of the rainfall, and the shear stress at the toe is positive.

**Displacement results under different rainfall conditions**

In Fig. 5, the maximum horizontal displacement of the toe of the slope is 13.98 cm when $t = 20$ h under heavy rain conditions, and the maximum total displacement of 16.24 cm is also at the toe of the slope.

![Fig. 1  Slope section model](image)

In Fig. 6, in analyzing the displacement and stability of the slope under different rainfall conditions, the toe and the top of the slope are selected as the research objects.

In Fig. 6, under light rain and moderate rain conditions, the total displacement of the slope top and the total displacement of the slope toe basically increase linearly after the rainfall process and the end of the rainfall and finally tend to balance; while under the conditions of heavy rain and heavy rain, in the total displacement of the slope top and the slope, there is a sudden change in foot displacement curve the toe, top of the slope, and time under different rainfall conditions, and the following graph can be obtained, as shown in Fig. 7.

In Fig. 8, under heavy rain conditions, the displacement suddenly increases at $t = 14$ h, tending to increase exponentially, which is consistent with the sharp decrease of the safety factor below the specification requirements at $t = 14$ h; the displacement suddenly increases at $t = 10$ h under heavy rain conditions. It tends to increase exponentially, which is consistent with the sharp decrease of the safety factor below the specification requirements when $t = 10$ h.
Results of psychological intervention for patients with urban anxiety

In the comparison of environmental care quality, humanistic care, and nurse attitude scores between the two groups of patients, the environmental care quality, humanistic care, and nurse attitude scores of the experimental group were higher than those of the control group, and the difference was statistically significant ($P < 0.05$) (Table 5).

Discussion

Stability analysis of rainfall conditions

This paper studies the results of seepage under various soil conditions for calculation purposes and combines the force on the slope with the size of seepage to analyze the three types of slopes subjected to different soils under different rainfall environmental conditions. Our purpose is to use various methods to detect whether the stability of the saturated homogeneous soil slope and the saturated heterogeneous soil slope is stable. Under the condition of applying the Midas GTSNX strength reduction method to the two, the soil quality of the slope is analyzed and judged before calculation. The most important survey results are as follows.

Under different rainfall environmental conditions, the seepage area and pressure of saturated soil increase with the increase of rainfall intensity, and the force received shows a linear upward trend. When the rainfall environment remains unchanged, the saturated non-saturated soil the force on homogeneous soil is much greater than that on saturated homogeneous soil. The safety and stability coefficient of saturated soil decreases by about 10% with the increase of rainfall; the safety stability coefficient of saturated homogeneous soil decreases with the increase of rainfall, while the safety stability coefficient of saturated heterogeneous soil decreases with increasing rainfall. The increase in rainfall decreases.

The minimum safety and stability value of the slope is when the rainfall is small, within 14 to 16 h, we will see that the minimum safety and stability value is 1.14176, which has exceeded the specified value range, so in the rainfall in the case of small environmental conditions, the safety and stability value of the slope is a reasonable standard. At the same time, when the rainfall is 20 mm/d and the length of time is 18 h, the safety and stability value is 1.11869; the value is also far beyond the specified range, so under the moderate rainfall, the slope in a relatively safe state, it meets the requirements of the public; when the rainfall is 40 mm/d and the time interval is within 24 h, the safety and stability value is 1.00012, which is less than our required range. The slope is in an unstable state. When the rainfall is very heavy and reaches 100 mm/d, the time interval is within 20 h, and the safe and stable value is 1.00123. At this time, the stable value is too small and not within the safe range. Such slopes are changing status.

After the rainfall ceases, the pressure on the voids in the soil will decrease or even disappear, the matrix suction will also decrease, and the shear stress will continue to increase at this time, when the rainfall is in a small or medium amount of environment, the top of the hillside. When the rainfall decreases or disappears, the force received has been increasing, and then, the force received gradually decreases and then becomes a stable stage, but when the rainfall is super invincible, the pressure on the top of the hillside is in the time interval. Different changes occur within the interval of 14 h and 10 h. In heavy rain or heavy rain under the same time interval, the increase rate of the force received is greater than the increase rate when the rainfall is small. The bottom of the hillside is affected by different soil qualities, and the pressure on the voids in the soil surface is negative. Under the condition of constant time, it is in a rainstorm state, and the pressure on the soil voids is the largest. In the state of getting smaller, the pressure on the soil voids is the smallest when the rainfall

| Soil properties | Cohesion (KPa) | Internal friction angle $\varphi$ (°) | Bulk density $\gamma$ (KN/m$^3$) | Saturated bulk density $\gamma_{sat}$ (KN/m$^3$) | Elastic modulus $E$ (KN/m$^3$) | Poisson’s ratio $v$ | Permeability coefficient $K_x = k_y$ (m/d) |
|-----------------|---------------|-------------------------------------|------------------|--------------------------|-------------------------------|-----------------|-----------------------------|
| Clay            | 18            | 15                                  | 19.6             | 20.0                     | 1.60E5                        | 0.35            | 4.60E-6                     |
| Strong weathering | 185         | 28                                  | 20.5             | 22.5                     | 2.60E5                        | 0.25            | 1.92E-6                     |
| Apoplexy        | 1200          | 43                                  | 22.5             | 23.5                     | 3.73E5                        | 0.20            | 1.00E-7                     |

Table 3: Slope physical and mechanical parameters

| Rainfall conditions of slope profile |
|-------------------------------------|
| Option 1 8 mm/d 8 h                |
| Option 2 20 mm/d 8 h               |
| Option 3 40 mm/d 8 h               |
| Option 4 100 mm/d 8 h              |

Table 4: Rainfall conditions of slope profile
decreases. Under the same conditions, the pressure on the voids will increase as the rainfall increases.

When the rainfall is moderate, the total distance from the top of the hillside and the total distance from the bottom of the hillside gradually increase with the change curve from the beginning to the end of the rainfall, and there is no change in the end; when the environmental conditions are heavy rain, the total distance between the top and the bottom of the hillside and the total distance have changed dramatically. When it rains heavily, the total distance is always increasing when the time interval is 14 h, and the total distance is always increasing. This situation and the time interval are 14 h of safe and stable values. It is the same; under heavy rain conditions, the total distance will gradually become larger when the time interval is 10 h, and the change of the total distance will increase linearly. This situation and the time interval are requirements of a 10-h safe and stable value. It is not the same; according to the data of the time interval and total distance of heavy rain, we know that as the amount of rainfall increases, when the total distance changes, the total distance when the rainfall is heavy is smaller than the total distance during the heavy rain.

Under the environmental conditions with small rainfall, the size of the fluctuations does not change much; the effective plastic zone penetration rate is 62.15% when the time interval is within 62 h under light rain conditions and the effective plastic zone when the time interval is within 62 h under moderate rain conditions; the slopes when a penetration rate of 76.33% have extremely high safety and stability coefficients. When the rainfall environment is heavy, the increase in penetration rate of the effective plastic zone changes when the time interval is 16 h, but within 24 h, the safety and stability factor is 1.00012 lower than our requirement; the penetration rate value of this time is 98.72%; we have to judge whether the edge of the hillside is stable.

Analysis of psychological intervention in patients with urban anxiety

There are many factors that cause human anxiety in our daily lives, such as the body’s own adverse reactions, unsatisfactory environment, high life pressure, work pressure, and incorrect self-regulation. These external social and environmental factors make people mentally disordered. Endocrine disorders cause physical discomfort, so it can make people feel uneasy and nervous and other negative moods. Anxiety caused by a bad mood will seriously affect human life and work, so people should pay attention to sleep and improve this bad mood.
through sleep. Our reaction to this kind of bad mood is that it is difficult to fall asleep, and more serious cases will also affect it. Our own living conditions and working mood have caused serious trauma in our hearts. What we need to do is to get rid of this negative emotion; usually read more books and travel; the society also responds many times. For example, setting up a psychological company will have a professional psychology. Experts come to get rid of bad emotions for the majority of people who are anxious, so that they can enter the new society more quickly, and use professional means to guide people to have more correct emotions and correct bad emotions in time. This method is now available. The society is very popular, and it has received extensive attention from most people. It is a kind of positive psychological guidance suggestion.

Psychological help is the first step at this stage. The main work content is to help people’s hearts, convey healthy psychological knowledge to people with anxiety, correct incorrect mental thoughts and negative news, and help patients with mental illness reduce the emotional excretion of psychological depression and gradually turn it into being positive, love life, love work, and love science. The patient’s emotions and heart are suffering from illness. When entering the hospital and when there are new people around, the patient will protect themselves to resist the harm that may be brought to them by the outside world. The doctor’s responsibility is to understand and feel the patient’s psychological state which helps patients get rid of pain as soon as possible, so that they can recover quickly. With the rapid development of modern medicine, the profession of psychologist is more and more popular with everyone. Doing a good job of psychological construction and mastering the ways and skills of communicating with patients are the only way for patients to gradually recover.

The specialty of social construction psychological care is to help patients get rid of the pain of emotional illness as soon as possible. Therefore, it is particularly important to grasp the relationship between patients’ emotions and their social environment and lifestyle and how to cause them to be emotional. The main symptoms are as follows:
① Let the patient face the courage and confidence of life again.
② Correctly guide patients how to deal with the new environment and how to get along with others.
③ Promptly help patients deal with their own psychological obstacles and re-establish confidence in communicating with others and contact with society in their hearts. At this time, doctors are required to treat patients with patience. The responsibility of doctors is to help patients lead a right life, roads to realize their value in life. The recovery of patients is inseparable from the treatment methods of doctors and modern medicine, and it is also inseparable from their confidence in themselves.

In the research experiment of this article, the control group is to provide medical psychological services to patients, and the other experimental group is to use psychological intervention. The result is that the members of the experimental group have a high sense of experience. For example, the treatment environment of the patients in the experimental group and the doctor’s attitude and the quality of treatment are very high, and the difference is statistically significant \((P < 0.05)\); Before the comparative test, there was no significant difference in sleep quality between the two patients, and the difference was not statistically significant \((P > 0.05)\); after the experiment, the sleep quality of the experimental group was low, which was statistically significant \((P < 0.05)\). Because the experimental group used less drugs, the difference was statistically significant \((P < 0.05)\).

### Psychological intervention strategies for patients with anxiety disorders

#### Music and art appreciation treatment methods

**Music and art appreciation therapy** Music therapy, as its name implies, is a behavioral way of treating diseases through music to achieve relief. The concert produces special stimulation to the human body to achieve the purpose of intervention, induction, and treatment. Music is also a new way of treating patients to achieve the purpose of healing. Music can stimulate human physiological organs to produce a hormone to regulate people’s mood, which is a new type of industry. After all, people now listen to music every day to ease the boredom in...
life. Compared with other treatment methods, music therapy is more targeted. The application of music in clinical medical treatment can improve the mood of patients and improve the health of people. Nowadays, music therapy is becoming more and more common in today’s society. At this stage, music therapy is widely used in the treatment of various diseases. It is mainly induced by artificial means to change the bad behaviors in the patient’s psychology, so as to improve and adjust the physiological functions of the human body, and finally cure the disease. Through clinical practice, it can be found that different types of music will produce different emotional responses to the human body. Some beautiful music concerts can fully improve the patient’s various physical skills. Under the influence of music, it can stimulate the cerebral cortex and increase activity, healing human body organs. Psychological intervention is effective in the treatment of depression and anxiety and can reduce the negative emotions that people produce.

**Significance of psychological intervention in the treatment of depression** The treatment of patients through psychological intervention will gradually shift the focus to music, which will relieve the patient’s depression to a certain extent. Patients can calm their minds and show their personal charm in soothing music. Under this influence, patients will increase their self-confidence and develop a positive and optimistic attitude. Under a good atmosphere, the emotional drive and infection, they will have a more objective and true cognition of themselves, which can change the question of self-denial. At the same time, it can achieve the purpose of enjoying music and enhancing emotional experience. Different people have different social roles and their roles in life are different. Different roles will produce different pressures. Under the influence of different pressures, the symptoms of depression will increase in patients. And by enjoying music, the user’s emotional experience is strengthened, and the purpose of improving the mood is achieved.

**Research on the impact of psychological intervention on depression and anxiety in college students**

(1) **Object**

Thirty college student volunteers were selected as the research objects, including 8 patients with mild depression and anxiety, 15 patients with moderate depression and anxiety, and 7 patients with severe depression and anxiety. There are 21 male patients and 9 female patients. The age range of patients is 19–23 years old.

(2) **Method**

Psychological intervention therapy in the treatment of depression and anxiety should vary from person to person and be carried out reasonably. The growth experience and the degree of disgust of different patients are also different. The difficulties and setbacks experienced in the growth process are also different. In the intervention through music therapy, the repertoire and content of music should be reasonably selected according to the actual condition of the patient, and the comprehensive movement, strength, and yin and yang should be

| Table 5 | Comparison of environmental care quality, humanistic care, and nurse attitude scores between the two groups |
|----------|-----------------------------------------------------------------------------------------------------|
| **Group** | **Number of cases** | **Environmental care quality** | **Humanity care score** | **Nurse attitude score** |
| Control  group | 45 | 87.45 ± 2.22 | 86.45 ± 2.22 | 86.04 ± 3.51 |
| Test group  | 45 | 95.24 ± 3.22 | 95.24 ± 1.43 | 97.56 ± 1.22 |
| T value  | 8.213 | 8.255 | 9.166 |
| P value  | 0.000 | 0.000 | 0.000 |
carried out reasonably, so as to fully highlight the role and value of music therapy.

1. Supportive psychological behavior intervention

Relate students, analyze students’ psychological needs, understand students’ needs through one-to-one communication, listen to students’ hearts, build a benign relationship of mutual trust, and enhance students’ sense of trust and dependence.

2. Cognitive intervention

Analyze the inducement and influence of several psychological factors such as emotion, spirit, and environment according to the actual situation of students, emphasize the importance of emotion; guide students to divert attention; and face pressure in all aspects through optimistic and cheerful emotions.

3. Psychological intervention

Infiltrate the purpose, meaning, method, and specific value of psychological intervention; choose music reasonably according to students; preferences; and effectively integrate music with physical therapy. Strengthen the adjustment of volume and atmosphere and guide students to close their eyes and concentrate on enjoying music, so that students can keep their whole body relaxed and release themselves in the music.

4. Make records and analyze

Analyze the results and behaviors of students before and after the intervention; make records and observations and treatment diaries; conduct musical psychological interventions through observation, feedback, and comparison; learn about the effects of treatment with classmates, friends, counselors, etc.; adjust and improve them in time. Under normal circumstances, students suffering from depression are depressed and lack the awareness of actively participating in music activities. In order to enhance the enthusiasm of students, they can understand the state of students through listening. In the early stage, students are allowed to try to feel the music and find resonance by choosing music that corresponds to the students’ emotions; when they choose meditative music, and through the teacher’s suggestion and guidance, let the students truly feel themselves. In the later stage, teachers must mobilize students through bright, open, and active music. Teachers can also try to guide students through reconstruction and release students’ pressure through percussion practice.

3. Results

After psychological intervention, about 85% of the students were satisfied with the treatment effect. Analyzing the behavior records of students, it can be found that after psychological intervention in music and art appreciation, students have significantly improved their social communication style, emotional performance, behavior, and somatization. The specific manifestations are as follows:

1. Social communication method

The students with mild anxiety had symptoms of introversion and poor communication before the intervention; the students with moderate symptoms had the problems of slowness, slowness, and slow response; students with severe symptoms were more silent, expressed compensation, and appeared lonely and lonely, with symptoms of suspicion. After the intervention through psychological intervention, the students with mild symptoms have an optimistic personality and a relatively calm tone, and their various performances gradually become normal. Students with moderate symptoms have no obvious communication barriers; they will actively communicate with students and can express their various ideas openly. Students with severe symptoms are gradually cheerful and can participate in group activities, and their symptoms are gradually relieved.

2. Emotional performance

Students with mild symptoms are significantly restless and helpless; students with moderate symptoms are depressed and often sigh, while students with severe symptoms have emotional instability, crying episodes, suicide attempts, and other symptoms. After psychological intervention, students with mild symptoms can effectively relieve their emotions; students with moderate symptoms can control their emotions, and their performance is relatively stable. Students with severe symptoms are more stable in various moods, and their moods are gradually optimistic.

3. Student behavior

Students with mild symptoms are unable to concentrate in class and have significant anxiety reactions; students with moderate depression have behaviors of skipping class and weariness; students with severe symptoms lack concentration, lack of self-confidence, and have a strong sense of inferiority; they use music to do so. Intervening students with mild symptoms have significantly alleviated their symptoms and showed progress in their studies; students with moderate symptoms can actively study; and the learning status of severe symptoms has improved.

4. Somatization
Students with mild symptoms have symptoms of neurasthenia, dreaminess, and light sleep; students with moderate symptoms have unstable sleep, presenting indirect insomnia, stomach pain, abdominal distension, and other symptoms. Students with severe symptoms have severe symptoms such as poor breathing, trembling all over, and insomnia. After psychological intervention therapy, the sleep quality of students with mild symptoms improved; students with moderate symptoms improved; students with severe symptoms improved, and symptoms such as tremor and shortness of breath returned to normal.

(4) Conclusion

The psychological intervention model has operability and practicality in the treatment of depression in college students. Reasonable plans for psychological intervention activities and scientific selection of repertoire can effectively alleviate various symptoms of anxiety and depression, which are targeted. Psychological treatment of depression and anxiety of college students can fully reduce the level of depression and anxiety and achieve the effect of improving the level of college students’ mental health and improving students’ mental health factors.

Conclusion

In today’s rapidly developed world of science and technology, communication technology is gradually becoming more and more common in people’s lives, and sensor networks have also taken a high leap accordingly. The sensor first collects external information based on its own small device, then processes the data at the speed of light, then persists in completing the transmission process, and transmits the information and analysis results to the final destination. Sensors are a new type of detection equipment. Their working environment is to monitor the information and data we need in remote areas or mountainous areas, because the sensor network is different from other equipment in that it cannot be recharged and reused, and its energy is used up. The life span is exhausted. The current network technology is super-developed. Under such circumstances, people living in cities have a new hidden danger. That is negative emotions and anxiety. When suffering from the disease, what we have to do is to choose medication, and music is the most important option. It is great. Music therapy for anxiety will have a significant therapeutic effect. In the real society, there is a good therapeutic effect to treat this anxiety caused by the city, to reduce the incidence, consolidate the effect of the treatment, and actively help patients recover quickly. Timely medication, etc. require the perfect cooperation of patients and doctors and nurses to treat the disease together. This process is a long process, and the patient may experience a very painful condition. The general body’s organ function will gradually decline, and even more people suffer from a lot of suffering. There are urban anxiety patients who do not have a clear understanding of themselves, they just feel that their body is uncomfortable, and they did not take it seriously, which led to the recurrence of the disease. Therefore, after confirming that the disease, the patient’s rate will only increase. They are all uncertain factors, so we must pay attention to our mental health and see the doctor in time without delaying the condition. There are many types of clinical treatments for urban anxiety. As an effective method, psychological intervention therapy has a significant effect in treatment. At present, many researchers have studied a lot of studies on whether there is a relationship between rainfall conditions and mountain slopes. They have conducted experiments to change the rainfall environment to see the stability of the slope. It is concluded that the cohesive force and internal friction angle are in a decreasing relationship with the water content. The rainfall environment changes the slope quality of the landslides. Many changes occur under the action of various factors, and there are also subsequent shortcomings.

Declarations

Conflict of interest The author declares no competing interests.

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