

# Effect of Psychological Dredging on Joint Injury Rehabilitation Training

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## Abstract

Joint injury refers to the injury of soft tissue around the joint, such as capsule, ligament and tendon, caused by the joint suddenly moving to one side and exceeding its normal range of motion under the action of external force. It is called joint sprain. Psychological dredging has been widely used in the field of psychology and medicine. Therefore, it plays a very important role in the rehabilitation training of joint injury.

**Keywords:** Psychological dredging; Joint; injury; Rehabilitation training; Function; research

## 0. Introduction

Psychological catharsis has been widely used in the field of psychology and medicine. In the whole process of psychological catharsis (Lavie, Ozemek, & Arena, 2019; Wu et al., 2020), the main body of psychological catharsis plays a leading role in the whole psychological catharsis. The subjectivity of psychological dredging subject is embodied in the specific process of psychological dredging, but it is determined by the consciousness and quality of psychological dredging subject (Dosbaba et al., 2020). Concretely speaking, the subjectivity of psychological dredging is mainly manifested in the dominance, forward-looking, creativity and coordination in the actual psychological dredging activities (Lee, Park, & Park, 2019; Yang et al., 2019). The favourable feature of the subject of psychological dredging in the execution of psychological dredging is referred to as the dominating role of the subject of psychological dredging. In the process of psychological dredging, the major body of psychological dredging takes the lead and plays a dominating role. It is the one who starts, organises, and guides the whole psychological dredging process. They are primarily responsible for planning, coordinating, promoting, controlling, and dominating the overall situation (Hansen et al., 2019; Taylor et al., 2021), leading the entire process of psychological counselling, organising and coordinating forces in all aspects, guiding psychological counselling objects to remove ideological obstacles, enhance ideological understanding, and establish a correct outlook on the world, life, and values, and guiding psychological counselling objects to remove ideological obstacles, enhance ideological understanding, and establish a correct outlook on the world, life, and values. As a result, a psychological counselling subject should be able to recognise the status and characteristics of the psychological counselling object, determine the direction and goal of

psychological counselling education, choose the content and method of psychological counselling, design the plan and goal of psychological counselling, organise and mobilise all types of psychological counselling forces, collect psychological counselling feedback information, and master the process of adjusting psychological counselling. Everything is completed before it is completed, and nothing is completed before it is completed (Baojian, Yanmei, & Chunyu, 2020; Palma et al., 2021).

The prospectivity of psychological dredging subject means that psychological dredging subject should foresee the future development and trend of psychological dredging object in accordance with the objective law of psychological dredging and the ideological status quo of psychological dredging object, do the ideological work ahead, guide psychological dredging object to develop the ideological and moral quality in line with the needs of social development, and prevent the psychological dredging object from appearing some unnecessary conditions in thinking. Thirdly, creativity (de Vasconcelos, Cini, & Lima, 2020; Pitkin, 2021). The creativity of the psychological dredging subject refers to that the psychological dredging subject is brave to explore, explore and innovate in the process of psychological dredging, and has innovative spirit and ability (Tarakci et al., 2020; Zhong & Zhu, 2021). Psychological dredging follows the law of development of people's ideological and behavioral activities, involves the overlapping and comprehensive application of various related discipline theories and methods, and the coordination of psychological dredging subjects refers to the use of various means and methods by psychological dredging subjects in the process of psychological dredging to achieve the consistency of various forces and factors such as families, schools, units and society, form a strong psychological dredging social support system (Bielitzki et al., 2021; Kober & Jarosz, 2003) and form a four-in-one psychological dredging network.

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As a result, we must pay close attention to the process of social psychological counselling and build a long-term psychological counselling system. Many researchers and patients prefer arthroscopic ligament restoration over open surgery because it is less intrusive, has a faster recovery (Caldani et al., 2020), has less problems, and provides good vision. Early rehabilitation training, which focuses on postoperative functional training and completely mobilises patients' initiative, may yield considerable results in the recovery of knee function (van der Spuy & Niehaus, 2018; Wei & Yalong, 2021). Patients will be in a foul mood throughout rehabilitation training because of postoperative discomfort, limb restriction, and medical expenditures, and compliance with rehabilitation training will be reduced (Eagderi & Mousavi-Sabet, 2021). As a result, combining psychological counselling with rehabilitation training seeks to enhance patients' poor moods, rehabilitation training initiative, and coordination, as well as improve knee function (Wilkinson, Donnenwerth, & Peterson, 2019). This study aimed to provide objective basis for the choice of clinical nursing mode by using focused psychological counseling combined with rehabilitation training for patients with anterior and posterior cruciate ligament injury (He, Liu, & Yi, 2019).

## 1. Research Method Design of Effect of Psychological Dredging on Joint Injury Rehabilitation Training

### 1.1 Selection of research subjects and methods

Based on the need of research, this paper searches the domestic and international literatures in the past 10 years on HowNet and Baidu Academic Web sites, and searches the relevant periodical literatures by using athletes as keywords, including 12 articles, 43 articles, 56 articles, 68 articles, and 128 articles. Through the school library to borrow 5 books of sports medicine, 7 books of foot injury, 10 books of sports injury and sports anatomy and 8 books of basketball, and classify them, to provide a reliable theoretical basis for this study. Through the careful observation of the two groups of experimental subjects after 12 weeks of experimental cycle, the number and frequency of the occurrence of secondary injury in the two groups were collected. In this study, according to the needs, sports medicine, sports rehabilitation, training and stepping on joint injuries and other aspects to further study and explore, through visits to experts, to determine the relevant indicators of the lateral ligament recovery, and to further exchange players rehabilitation training, guidance and suggestions for this study to provide scientific support.

Through consulting a large number of literatures and books and interviewing with experts, a reasonable rehabilitation training plan was designed to compare with routine treatment, and the rehabilitation index of the lateral ligament before and after the experiment was tested to provide theoretical basis for this study. The damage to the lateral collateral ligament of the joint is diagnosed as follows, according to Practical Orthopedics: Define the history of flexion and varus injury; joint pain will appear shortly after the injury, accompanied by postponement, swelling on local examination, positive stress test of subcutaneous fatigue plaque varus, no fracture sign on forward, lateral, or CT examination; and rule out an avulsion fracture of the ligament attachment point.

After speaking with athletes and coaches before to the experiment, it was discovered that 80 percent of WCBA players had at least one lateral ligament injury within three months. Choose 20 athletes who have minor injuries or symptoms involving the lateral tendons of the joint. Figure 1 depicts the scenario of the chosen players.



Figure 1. Personnel profile

From Figure 1, we know that the training status is the same, including 5 guards, 12 forwards and 3 centers. Then we use SPSS20.0 software to deal with the three positions in the computer, randomly grouped. Then select the experimental indicators, the first is the functional motor screening, functional motor testing is physical rehabilitation therapists from the summary of practice, mainly used for motor mode testing and screening. Gray Cook and Lee Burton first put forward a set of methods to evaluate the athlete's body function, which was firstly used in rehabilitation training and physical training. Gray Cook and Lee Burton perfected the methods and theories of FMS testing in practice. The application of FMS can achieve the goal of reducing and preventing sports injury, and through certain training methods can effectively improve the ability and performance of sports. There is a lot of research support for the application of FMS in basketball special test at home and abroad.

The results of FMS evaluation showed that FMS had a good sensitivity to the evaluation of the action patterns of 39 adolescent basketball players. The scores of each action

pattern before and after training were  $P < 0.05$ , with significant differences. Through the analysis of the major joints tested in each of the seven movements in FMS, it was found that the three movements of front and rear bow, hurdle and deep squat can be applied to screen the flexibility of step joint and the risk of sports injury. To some extent, these three movements can play a role in evaluating step joint function. The scoring schematic diagram is shown in Figure 2.

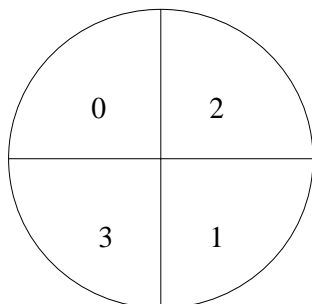


Figure 2. FMS score diagram

The FMS motion score is split into four classes, as shown in Figure 2, with 0 being the lowest and 3 being the greatest. Each level is scored as follows: 0 for discomfort, 2 for failure to finish the whole action or retain the original posture, and 3 for compensation or poor test quality.

Once the joint ligament has been destroyed, the joint will become dysfunctional, and the dysfunction will be objectively reflected by a change in the joint's mobility. Flexion and extension are the two major types of joint movement. The goniometer should be positioned such that the longitudinal axis of the fat bone intersects with the junction point of the outside border of the foot. The fixed arm is parallel to the fat bone's longitudinal axis, while the moveable arm is parallel to the 5th bone's longitudinal axis. After massage, exercise, and other relevant therapies, measuring the flexion and extension activity of stepping joints should be avoided.

Isokinetic exercise plays an important role in the treatment and rehabilitation of injuries in sports medicine. At present, the isokinetic muscle force measurement technology has been more mature, and the performance of the test instrument is relatively stable, and gradually applied to multiple fields. Some scholars believe that isokinetic muscle strength testing has the following advantages: it can provide different training modes, safe and effective, and can provide detailed parameters and indicators of muscle function. In order to study the ability of different muscle nerves, the absolute muscle strength was measured by 30-600/s in slow speed, 60-1800/s in slow speed and 180-3000/s in fast speed respectively.

The maximum trampling force was measured at an angular velocity of 600/s, initially at the fifth week after the

experiment, and again at the 12th week. The specific test steps are as follows. Before the test, the professional tester shall start the machine and debug the machine according to the provisions on the use of the machine, input the basic data of the first person under test, and the author is responsible for arranging the test sequence, and requires each person under test to carry out a 15-minute warm-up activity to prevent the muscles from stretching and exerting insufficient force. During the test, the instrument selects the centripetal and centrifugal isovelocity modes, fixates the athletes in strict accordance with the prescribed requirements, makes the rotation axis consistent with the joint activity axis and carries out the gravity compensation, and explains to the subjects that only the joint force of the subjects is allowed to be compensated by other parts, and the subjects conduct three submaximal intensity exercises before each test, are familiar with the movement mode, and then conduct three formal tests, and take the highest test value after 30 s intervals. After the test, the test data will be imported into the U disk backup archive for data statistical analysis to prepare.

Pain is a frequent sign of a joint's lateral ligament damage. Body, soul, and cognition all contribute to subjective suffering following an injury. As a result, assessing pain after an injury is difficult. Assessment of Pain The Clinical Research Center of the National Institutes of Health in the United States for the use of the visual simulation scoring system to quantify post-injury pain. VAS is the most widely used, accurate, and easy measure of pain evaluation in clinical and research settings, according to Weini et al. (2019). The numerical picture on the scale might represent the patient's subjective pain feeling. 0 points equals no pain, 10 points equals suffering, and the aim of quantification is met.

The time from the start of injury to the completion of the relevant sports was used as the observation index. Improvement: Can walk in a painless state. Basic recovery: Basketball skill training can be carried out under the protection of protective gear or support belt. Recovery: Can wear protective gear or in the support belt under the protection of basketball practice. Complete recovery: After removing the protective devices or supporting straps, the tester can still carry out the same speed muscle strength test for basketball actual training normally. In this study, we used the same speed muscle strength test system of SOMED2000 made in Germany to test the flexor muscle group (triceps calves, posterior tibiae, flexors thumbs, flexors digitorum digitorum longus, flexors fat and brevis fat), dorsal flexors (tibiae tibiae, extensors hallucis, extensors digitorum digitorum longus and third muscle) and flexors muscle of knee joint (semi key muscle,

semimememembranchial muscle, biceps femoris muscle, gracilis muscle, tendon muscle, muscle suture and pangus muscle, etc.), extensors muscle group (quadriceps femoris muscle). The basic statistical information of the test includes age, height and weight. The indexes before and after the test include flexors and flexors, flexors force of foot and knee, FMS (squatting, hurdles, squatting and squatting), recovery time and VAS pain score were recorded in SP20.0 software.

### 1.2 Establishment of rehabilitation training model of psychological dredging joint injury

In order to study the effect of psychological dredging on rehabilitation of joint injury, a rehabilitation model of psychological dredging is designed in this paper. Firstly, we need to judge the normal distribution of dredging factors in the model.

$$f(x) = \frac{1}{\sqrt{2\pi}} \exp\left[-\frac{1}{2\sigma^2}(x - \mu)^2\right] \quad (1)$$

In the formula (1),  $\sigma$  and  $\mu$  represent the relevant parameters of the function at that time, and  $x$  is the psychological dredging index. Therefore, if the parameters of the function remain unchanged, the overall state of the distribution curve needs to be designed by using the theory of sample average and a new distribution function as shown in (2).

$$f(t) = \frac{\Gamma(\frac{n}{2})}{\sqrt{(n-1)\Gamma(\frac{n}{2})}} \left(1 + \frac{t^2}{n-1}\right) \quad (2)$$

In function (2),  $t$  represents the statistical value at that time, and  $n$  represents the psychologically conductive ratio. In this case, the average value of the iteration coefficient obtained by the function needs to be calculated, and the calculation formula is as follows (3).

$$\bar{x} = \frac{x_1 + x_2 + \dots + x_n}{n} \quad (3)$$

In formula (3),  $x_1 \dots x_n$  represents the indicator group, at which time the effect testing error may occur and the error rate needs to be eliminated in advance, as indicated in formula (4).

$$\lambda_i = 1 - \frac{\bar{x} - x_i}{x_i} \quad (4)$$

In formula (4),  $\bar{x}$  represents the range of evaluation, at which point a finite element matrix is formed, as shown in (5), and a research model for rehabilitation training is shown in (6).

$$\{f\} = \{\delta\}^e \quad (5)$$

$$E = \frac{x_1 + x_2 + \dots + x_n}{n} \cdot \lambda_i \quad (6)$$

In formulas (5) and (6),  $\{f\}$  represents the displacement array and  $\{\delta\}^e$  represents the function matrix, and the formula can be used to assess the rehabilitation damage.

### 1.3 Dividing the structural characteristics of psychological guidance

After constructing the occasional injury rehabilitation training model, we need to divide the psychological

counseling structure characteristics. First, we need to draw the map of psychological counseling individual mechanism, as shown in Figure 3.

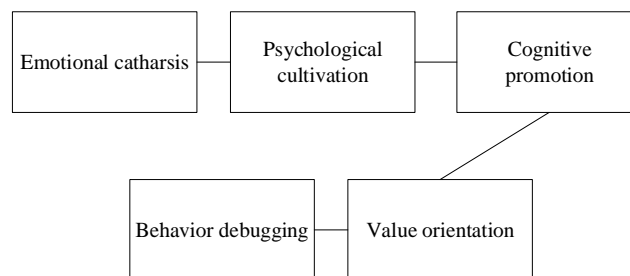


Figure 3. Diagram of individual action mechanism

As shown in Figure 3, psychological therapy strives to improve people's overall growth as well as the harmonious development of people and society. As a result, the degree and level of harmony and harmonious growth between man and society, as well as where to develop, are governed by internal reasons in combination with specific external causes suited for internal causes, rather than by external factors alone. As a result, as illustrated in Figure 4, it is required to investigate the mechanism of their effect.

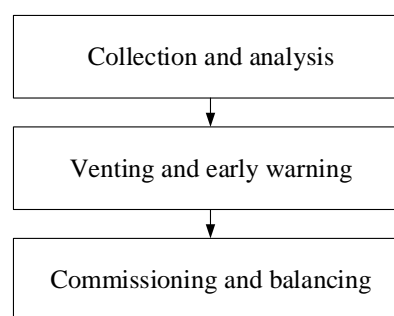


Figure 4. Analysis process

As can be seen from Figure 4, reasonable and appropriate emotional catharsis is of great significance to an individual's mental and ideological health. In the process of psychological catharsis, the subject of psychological catharsis provides a safe, trustful and relaxed atmosphere for the object of psychological catharsis by using relevant theories and methods, and makes the object of psychological catharsis open its heart to vent the depressed emotion and emotion. This undoubtedly provides an opportunity and a platform for emotional catharsis and avoids the accumulation of blocked negative emotions. In modern Chinese dictionaries, essential elements are defined as the necessary elements that make up a particular system or activity, and in system theory, essential elements are the basic elements and factors that make up an organic system. Extended to the ideological and political education, the elements of psychological counseling is the essential basic or main factors that constitute the psychological counseling operation system or practical



activities. First, it must be carried out in the context of the entire psychological dredging system, and it must be organically connected with other factors in the system, and it must have relevance; second, it must be carried out at the same psychological dredging operation level, and it must be the smallest unit in the system, and it must have singleness; third, it must be contained in the psychological dredging system, and it must have internal consistency; fourth, it must be contained in the psychological dredging system

Simultaneously, it examines the actual process of psychological dredging. Psychological dredging is a unique educational process including ideological and political instructors and educational objects in a particular setting, and it has three main components: subject, object, and circumstance. The essential aspects of psychological counselling may therefore be summarized as the major body, object, purpose, content, and circumstance of psychological counselling, based on the preceding analysis. Subject is really a philosophical notion from an etymological standpoint. The so-called subject refers to a person who is purposefully and consciously engaged in cognitive activities and practice. Subjectivity is the factor of subjectivity and activeness in practical activities. It takes on the tasks of putting forward practical purposes, manipulating practical tools, reforming practical objects, and controlling and controlling practical activities.

In psychological dredging, the subject of psychological dredging refers to the user of psychological dredging and the implementer of psychological dredging. It corresponds to the object of psychological dredging and is the subject of psychological dredging to a certain object of psychological dredging. Namely, the ideological and political educators who purposefully conduct psychological dredging for psychological dredging objects in the process of psychological dredging. In the process of psychological dredging, the main body of psychological dredging plays an important role in determining the goal, organizing the content, designing the link, creating the good atmosphere and guiding the object's thought and behavior. In the application of psychological counseling, the main body of psychological counseling promotes the development of psychological counseling theory and practice with its own characteristics. The point here is that psychological counseling itself is a method of ideological and political education, so the main body of psychological counseling is ideological and political educators. However, due to the particularity of psychological counseling, not all ideological and political educators are the main body of psychological counseling. If we want to be the main body of psychological counseling, we must have relevant

professional knowledge, use relevant theories and methods, skillfully use psychological counseling skills and strategies. Generally speaking, the main body of psychological counseling should have certain quality and special vigor.

In the whole process of psychological dredging, the main body of psychological dredging plays a leading role in the whole process of psychological dredging. Therefore, the most notable feature of the main body of psychological dredging is the subjectivity. The dominance, forward-looking, inventiveness, and coordination in real psychological dredging operations are all examples of subjectivity in psychological dredging. As a result, it is essential to place a premium on the mechanism of social psychological counselling and to develop a long-term psychological counselling mechanism. This kind of method may assist individuals in establishing the ideal fair notion, expanding the benefit expression channel, and increasing the likelihood of societal stability. Only by synchronising the forces of all components of psychological dredging can the main body of psychological dredging develop strong cohesiveness and achieve the optimum psychological dredging impact. Therefore, in order to coordinate the social forces, the main body of psychological counseling needs to integrate the psychological counseling resources of school, community, family and self, expand the new space of psychological counseling, so that all departments of the whole party and society can form a social support system of psychological counseling with their respective positions, unified goals and mutual cooperation.

As a method of ideological and political education, psychological counseling requires the main body to have higher comprehensive quality, such as ideological quality, political quality, moral quality, knowledge quality, psychological quality and physical quality, etc. First, ideological quality. Ideological quality is one of the necessary qualities for psychological counseling. It mainly includes three aspects: ideological concept, mode of thinking and style of thinking. The major body of psychological counselling should develop fresh accurate concepts, continual information absorption, an open thinking mode, and a decent work style. The ideological and political educators, as the main body of psychological counselling, should establish an equal attitude, respect their personality characteristics, psychological demands, and ideological reality, follow the law of the formation and development of people's ideological activities, carry on the democratic style of work, and allow the objects of education to fully express their opinions, opinions, and even dissatisfaction in the process of psychological counselling. Then there's the political quality. The

fundamental characteristic of a psychological dredging topic is political quality. We should have a solid political stance, a firm socialist political ideology, and a firm, clear-headed, and sharp political attitude as a firm instructor of psychological dredging. Second, we should have a high political level, be able to recognize all types of ideological tendencies, and maintain constant political alertness. In the process of psychological counseling, the main body of psychological counseling should not only respect the individuality, psychological demands and ideological reality of the educational object, but also have keen political sensitivity, and should not ignore the political direction in order to deliberately cater to the psychology of the educational object. In fact, the aim of psychological counseling is to solve the problem of people's thinking, to correct their incorrect ideas, and to return to the healthy and correct direction.

The main body of psychological counseling must also have a higher psychological quality, with a good personality of psychological quality. As an ideological and political educator who makes use of psychological persuasion, first of all, he or she shall be enthusiastic, cheerful, frank, friendly, sensitive and humorous; have keen observation, rich imagination, strong memory ability, analysis and comprehensive ability and fluent language expression ability, etc.; be good at exchanging thoughts and emotions with psychological persuasion objects, which will be easy to gain the trust of education objects; in addition, he or she shall have certain psychological qualities, including self-recognition ability, trustworthiness, honesty, strength, enthusiasm, agility, patience, sensitivity and giving people freedom. He or she shall be tolerant, helpful and have a strong sense of responsibility to people; especially, he or she shall have great interest in exploring society and life, have firm faith and confidence, and have a relatively high psychological endurance ability. These good psychological diatheses are helpful for the psychological dredging subject to communicate and talk with the educational object and to deal with all kinds of problems actively, flexibly and effectively.

#### **1.4 Analysis of Rehabilitation Training of Joint Injury by Psychological Dredging**

As one of the most important load-bearing joints, joint is also one of the most complex anatomical structures, which plays a role in connecting lower limbs and the ground. In the process of running, jumping, jumping and landing, the athlete will produce the impact force of the step joint on the ground, which will lead to the damage of the soft tissue of the step joint. The most common soft tissue injury is the injury of lateral ligament. A lateral ligament injury in an

athlete will damage the joint's stability and function, resulting in a reduction in athletic ability and a direct impact on the player's competitive level. The greater the athlete's level, the more significant joint function becomes, which means that the health and function of the lateral ligament is very crucial. The health and rehabilitation of the lateral ligament of the joint is critical for WCBA players in terms of performance and workout performance.

To increase athletic performance and extend an athlete's career, it is critical to develop a fair and effective rehabilitation strategy for WCBA players to prevent and treat lateral ligament damage. In earlier research, WCBA players with lateral ligament injuries were not systematically, fairly, or appropriately trained for 12 weeks, and the assessment of rehabilitation outcome was confined to symptoms and discomfort after few days of therapy. The study evaluated the pain, muscle strength and function of the trampling joint after the injury of the lateral ligament of the joint, and improved the muscle strength, stability and proprioception of the trampling joint of WCBA players. The more severe the pain is, the slower the recovery of injury is, and the less satisfactory the treatment is. On the contrary, the lighter the pain is, the better the treatment is. The VAS Pain Assessment Scale can directly reflect the pain degree of the subjects, and indirectly reflect the treatment effect of the two groups. From Tables 15 and 16, we can see that the VAS scores of the experimental group and the control group were significantly different from those of the two groups immediately and two weeks after injury. After two weeks of rehabilitation training, it was found that the mean of the two groups was  $P < 0.01$ , and the difference between the experimental group and the control group was very significant.

After four weeks of rehabilitation training, it was found that the mean of the two groups was  $P < 0.01$ , which proved that the difference between the experimental group and the control group was very significant. Therefore, the experimental group of rehabilitation training in two weeks after the experiment and around the treatment effect is better than the conventional treatment of the control group. The experimental group had better therapeutic effect in two weeks and four weeks, and the lower VAS score mainly included the following aspects: 1. Early rehabilitation training can promote the blood and lymph circulation of the injured area, strengthen the metabolism of the injured area and the surrounding environment, provide adequate nutrition transportation and transport route for the recovery of the injury of the lateral ligament, and do not cause the excessive exudation of soft tissue fluid and blood in the injured area to affect the recovery environment of the injured soft tissue, so as to promote its

better recovery and achieve the ideal therapeutic effect. Second, the early rehabilitation training can prevent the soft tissue adhesion, and create a good condition for the recovery of the lateral ligament of the joint. Slower or irreversible damage of the recovery process may be manifested in the affected area in a painful way, and the soft tissue in the injured area itself may be manifested in pain symptoms, which is also one of the reasons why many old injuries of the lateral ligament are manifested in pain, that is, the factors leading to soft tissue adhesion after injury are not well avoided and handled.

Ligaments are inextricably linked to bone and muscle. Bones are joined by ligaments, while muscles make bones. The ligament takes time to repair, but since just the ligament is injured, the bone is still in a good position, and the surrounding muscles are in good shape, the ligament recovery will be accelerated. Early rehabilitation training may help the dislocation of bone and joint produced by lateral ligament damage to return to a normal position as quickly as possible, and the spasm or tension of muscle induced by pain can be relieved in the shortest time possible. This solves the problem of pain caused by a lack of early rehabilitation training, pain caused by incompact contact between bone and bone in the trampoline's facet joint, pain caused by secondary cartilage injury, and muscle spasm and tension caused by early pain stimulation, and if these muscle changes are not carried out early rehabilitation training, the injured part will be restricted for a certain period of time. Early rehabilitative training may boost WCBA players' confidence in the event of a lateral ligament damage. Early rehabilitation training can increase the early activity of the subjects, increase their pain acceptance, and make them face the pain symptom more calmly. Injuries to the lateral ligaments of a WCBA player can cause soft tissue adhesions, decelerated blood circulation, non-benign dislocations between bone and

bone, and muscle tension or even spasms that control the joint. From the end of the acute phase of post-injury rehabilitation training began, experimental results show that can effectively reduce the pain of patients. The results showed that the resistance training group could effectively reduce the VAS score of the joint sprain, which also proved that the early rehabilitation training could effectively prevent the occurrence of the above secondary symptoms, reduce the VAS score of the subjects, and have a good effect on the lateral ligament injury of the joint of WCBA players.

## 2. Experiment

In order to verify the effect of psychological counseling on rehabilitation training of joint injury, we compared the effect of psychological counseling with that of traditional joint injury training.

### 2.1 Experimental Preparation

Twenty players with ankle injuries were surveyed and grouped first. The results are shown in [Table 1](#).

**Table 1**

*Basic information about the subjects*

Groups	Experimental group	Control group	T	P
Age	23.80	23.2	0.479	0.638
Height	180.80	181.30	0.199	0.844
Weight	76.9	77.5	0.172	0.865

As can be seen from [Table 1](#), the basic information of 10 randomly selected experimental subjects and 10 control subjects, including age, height and weight, was compared through independent sample t-test at this time. The results showed that there was no significant difference between the two groups, and the groups were reasonable. In order to ensure the accuracy of the evaluation results, it was necessary to carry out VAS scores. The scoring results were shown in [Table 2](#).

**Table 2**

*VAS score results*

Groups	Experimental group (N = 10)	Control group (N = 10)	T	P
VAS score immediately after injury	7.40	7.60	0.438	0.667
VAS score 2 weeks after injury	3.50	4.60	2.905	0.009
VAS score 4 weeks after injury	0.60	1.80	3.043	0.007

**Table 3**

*Recovery time of exercise ability*

Groups	Experimental group (N = 10)	Control group (N = 10)	T	P
Time of improvement	5.10	5.90	-2.023	0.40
Basic recovery time	8.60	10.00	-3.642	0.004
Recovery time	14.60	18.10	-7.464	0.004
Full recovery time	32.10	40.40	-12.466	0.004

We can see from Table 2 that there is no significant difference in VAS ratings between the two groups, indicating that they were equivalent prior to the trial. The VAS ratings of the two groups were considerably different after two weeks. The experimental group's VAS scores were considerably lower than the control group's after two weeks. The experimental group's VAS score was considerably lower than the control group's four weeks following injury. The time it takes for motor function to recover should be recorded, as indicated in Table 3.

From the Table 3, there was significant difference between the experimental group and the control group in the time of recovery of exercise ability. The difference between the two groups was significant. The recovery time of exercise ability between the experimental group and the control group was significantly different. In order to calculate the research effect of the two methods, the research index

of the two methods needs to be calculated. The calculation formula is as follows (7) and (8).

$$p = \frac{\sqrt{l}}{g} \quad (7)$$

$$h = pl \quad (8)$$

In formulas (7) and (8),  $p$  represents the evaluation coefficient,  $l$  represents the statistical effect,  $g$  represents the statistical base, and  $h$  represents the effect index. At this time, the formula may be used to calculate the effect index of rehabilitation training as a reference for subsequent experiments.

## 2.2 Experimental results and discussion

Based on the above experimental samples, the function of rehabilitation training research method and the traditional function research method are used for analysis. Using formula (8) to calculate the function index of the two methods, set 1 as the full score index, and the calculation results are shown in Table 4.

**Table 4**

### Experimental results

Number of studies	The research index of the research method of rehabilitation training effect designed in this paper	Study Index of Traditional Research Methods of Rehabilitation Training Effect
1	0.994	0.465
2	0.998	0.369
3	0.946	0.447
4	0.961	0.598
5	0.978	0.648
6	0.983	0.554
7	0.991	0.512
8	0.935	0.534
9	0.976	0.504
10	0.953	0.573

As can be seen from Table 4, the research index of the designed research method of rehabilitation training effect is high, which proves that the research effect is good and has certain application value.

## 3. Conclusion

Psychological guidance can better embody the subjectivity of the educational object. Compared with the traditional methods of ideological and political education, psychological counseling pays more attention to the subjectivity of the object of education and makes it give full play to its own subjective initiative. First, psychological counseling attaches great importance to the understanding of psychological counseling object. That is, in the process of psychological counseling, the main body of psychological counseling follows the formation and

development of people's thought and behavior, and insists on starting from the inner reference system of the education objects. From the point of view of the object of education, we can think and solve problems, so that we can feel the concern, understanding and support of the educator, so that we can arouse the greatest enthusiasm and creativity of the object of education and accept ideological and political education voluntarily.

The need of two-way communication and interchange between the two sides of education is emphasised in psychological therapy. In the entire process, it is not only the educators' information transmission to the educators, but also the interaction between the educators and the educators that provides the educators with the most space and opportunity to express their own views, opinions, and ideas; psychological counselling places a greater emphasis on the ideological interaction between the educators and



the educators, which leads to the educators' participation in the entire psychologic process. Finally, psychological counseling can be closer to the object of education. Psychological counseling is not only an exchange of ideas between the two sides of education, but also a process of emotional communication. In this process, psychological

counseling, with its unique ways and strategies, can make the object of education feel the concern, understanding and love of the educator, so that the object of education can have a positive emotion and emotion, stimulate the inner motivation of his participation in psychological counseling and education, and tap his greatest potential.

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