

## **Analysis on the forming factors of the best mental state of martial arts routine athletes before competition.**

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### **Abstract**

**Pre-competition mental state of martial arts routines athletes is an important factor in determining the level of competition. In this paper, forming factors of the mental state of martial arts routine athletes before Competition are analyzed through the experimental method combined with the questionnaire survey, setting the experimental group and the control group to start a controlled trial. The psychological training method was adopted for the experimental group, and the original training method was adopted for the control group for two months. The experimental structure analysis found the formation factors of the best psychological state before competition, which can be improved by using the appropriate method.**

**Keywords:** Martial arts routines, Athletes, Pre-competition, Psychological state.

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### **Introduction**

Martial art is a traditional sport, which must be based on the effective combination of physical and skill basis. The current athletes continue to improve their physical quality, making the physical quality of different athletes continue to close. Based on continuous improvement of training methods and training skills, the technical level of athletes is also closer. So when the athletes are in the course of the game, the psychological quality to a certain extent, determines the level of its technical level [1]. This paper analyses the relevant factors of martial arts athletes' psychological state adjustment before competition.

### **Research object and research method**

The research methods used in this paper are literature, interview, questionnaire, test, where the most important are the questionnaire survey and test method. After using the questionnaire determines the basic knowledge, the test is started. The study object is a martial arts team in one province, setting a total of 20 subjects.

In order to study the influencing factors of martial arts routine athletes before the game, by the experimental method, one group is set as the experimental group and the other group as the control group. The research period is set as two months. Twenty random subjects were randomly divided into experimental group and control group (n=10). Before and after the experiment, the physical fitness of the experimental group and the control group were tested, and the technical level and psychological quality were inspected, determining the

reliability of the test. Statistical analysis showed that the levels of the two groups were similar, and there was no significant difference ( $P < 0.05$ ). On the basis of this, the experimental study was conducted to ensure that the training content, time, site, schedule and intensity of the experimental group were consistent with that of the control group. Only the training method was used as the variable.

During the course of the experiment, the control group was trained by normal training mode, and the training method was not changed. In addition to the general training methods, training methods of the test group also includes psychological training methods such as mental training method, self-suggestion method and simulated training method. The main role of Ni An Dong training method is to allow athletes to quickly adapt to the venue and game time, and themselves. That is, they can quickly adapt to the scene environment in the actual game; simulation training law is to allow athletes to adjust the actual situation for the timely response to a variety of emergencies; self-hint rule is to stimulate the martial arts through the language stimulus, enhancing its psychological strength in a variety of environments [2].

### **Test results and analysis**

**Comparison of psychological quality parameters of two martial arts routine athletes before test:** In order to ensure the reliability of the test, we conducted a psychological quality test for all the athletes before the test, setting the direction of the investigation as the fear of the game failure, the expectations of the masses, the state of dispersion, self-

efficacy, team task expectations, self-task expectations and other aspects. The results are shown in Table 1.

**Table 1.** Initial psychological questionnaire survey.

	Experimental group mean $\bar{x}_1$	Control group mean $\bar{x}_2$	T	P
Race failure concerns	14.32	13.95	1.013	<0.05
Mass expectation pressure	12.34	13.61	1.002	<0.05
State dispersion	19.08	15.43	1.016	<0.05
Self-efficacy	25.43	28.56	1.015	<0.05
Team task expectation	14.21	14.12	1.014	<0.05
Self-task expectation	14.62	14.33	1.011	<0.05

It can be seen from Table 1 that the levels of the experimental group and the control group were similar before the test. Although there were some differences, the overall level was basically the same, and there was no significant difference between the experimental group and the control group by T test. Therefore, the psychological level of the experimental group and the control group was basically the same before the experiment. The experiment can be carried out, and the results obtained by the two groups of martial arts routine athletes in the experimental group and the control group were reliable.

**Table 2.** Post-experimental psychological questionnaire survey.

	Experimental group mean $\bar{x}_1$	Control group mean $\bar{x}_2$	T	P
Race failure concerns	19.01	13.55	2.773	<0.05
Mass expectation pressure	16.72	12.51	2.745	<0.05
State dispersion	22.17	16.33	2.566	<0.05
Self-efficacy	31.24	28.56	1.015	<0.05
Team task expectation	14.21	13.92	1.899	<0.05
Self-task expectation	13.35	13.33	1.043	>0.05

From the table above, we can see that after trained by general training methods, the psychological quality of the control group has not been effectively improved. The reason is that martial arts routine athletes in the normal training did neither take improving the psychological quality as a basic training program, nor develop specialized training strategies, so in the actual training process, the psychological quality training process was ignored, which led to psychological problems in many martial arts routines athletes in the competition, making its real level not be played [3].

After receiving the corresponding training methods, the students in the experimental group can improve the technical level of martial arts routines and improve their technical level. Through the comparative analysis, we can see that the worry about failure of the game, the expectations of the masses, the state of dispersion, self-efficacy, team task expectations have a greater impact on the formation of psychological state, and self-task expectations has a less impact. Using mental training

### **Comparison of psychological quality parameters of two Wushu routine athletes after test**

In accordance with established guidelines to start the test, the two groups were trained. After the 2 months training cycle, the psychological tests for training personnel was taken. The test items and test methods are the same as the pre-test test form to verify the reliability of the test results. After the test, the psychological parameters of martial arts routine athletes were compared as shown in Table 2.

method, the self-suggestion method, the simulation training method and other psychological training methods can help athletes correctly guide their psychological direction to the right direction, to help them overcome the spot tension. Martial arts routines athletes can adjust their attention to a successful experience in order to help them gain confidence, or to amplify their own positive thoughts, eliminating negative thoughts, stabilizing their mental state, and helping martial arts routines athletes adjust their status to the best before the game, and giving the best performance in the game.

### **Conclusion**

In this paper, through the experimental study of forming factors of the best mental state of martial arts routine athletes before competition, the experimental group and the control group were set up. The training of the experimental group was carried out by means of psychological training methods such as

metal training method, self-suggestion method and simulated training method. There was no significant change in the psychological quality of the control group after the experiment, and the psychological level of the experimental group was improved. This shows that the reasons for the formation of pre-competition psychological state, including several elements, and through scientific training methods, the level of psychological factors can be improved.

## **References**

1. Hou J. Study on the dietary intervention of wushu sanda athletes after the period of recovering fatigue. *Adv J Food Sci and Technol* 2015; 9: 253-256.
2. Cheah BC, Loh TC, Tan CHE, Tan CHE, Beaven CM. Comparison of eccentric utilization ratio of elite karate (kata) with elite Wushu athletes. *Revista De Artes Marciales Asiáticas* 2016; 11: 22.
3. Dalkilic M, Atasoy M. Youth and Sports Organization of Employee Job Satisfaction: The Coach. *Social Science Electronic Publishing* 2016; 10: 60-67.

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