Effects of Tai Chi Exercise on University Student’s Mental Health

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ABSTRACT
Based on the psychological effect of physical exercise, international research on the more major sports events or around the effectiveness of exercise on mood, how to give full play to the best psychological effects of physical exercise, so that those who exercise the healthy physical and mental development of psychological research are becomes a new popular subject. Tai Chi practitioners of some students by state of mind, emotional experience, mental health, mental effectiveness assessment, and the results show that Tai Chi’s unique form of exercise on psychological adjustment has a good effect. Calm the mind, loose the body, remove distracting thoughts, the intention is not hard, physical and mental unity of the technical requirements, the exercise balances state of mind of college students, to relax mental tension and stress. The longer Tai Chi exercise, the higher the level of mental health.

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1 Introduction

In recent years, their mental health concern, physical exercise as a means of improving mental health, has gradually been recognized. In traditional Chinese Tai Chi exercise fitness health patients in its deep philosophical principle, a broad mass base and significant health affects more and more attention. How to give full play to the best psychological affects of Tai chi exercise, so that students who develop a healthy body and mind this study. In this paper, experimental study of Tai Chi teaching field effective of the impact of psychological problems, to explore the teaching situation in the Tai Chi students’ emotional state. The aim is to explore the Psychological effect Tai Chi exercise and the correlation for the students through Tai Chi exercise to improve the psychological conditions for feasibility basis.

2 Research Subjects and Methods

2.1 Subject of study

Subjects were 184 male students, aged 17-20 years old, from Huazhong University of Science and Technology.
2.2 Research methods

2.2.1 The documents and materials
2.2.2 Introspection
To enable students to self-psychological observation, according to mood level A, B, C, D, E five states of mind the contents of their report came out.
2.2.3 Experimental method
In the study period, each test is divided into pre-class, classes, after-school test subject’s state of mind. Teaching lesson plans for the last week, a total of 17 class five tests.
2.2.4 Questionnaire
SCL-90 scale
2.2.5 Mathematical statistics
Test data using SPSS 11.0 software for statistical analysis

3 Analyses and Discussion of Results

Psychological effect is that people engage in when things get a mental health development of the mental activity. How to play the best psychological benefits of Tai Chi exercise, students to promote healthy physical and mental exercise of those development and training so that students can enjoy the pleasure, on this issue in depth and detailed study and research, for Tai Chi psychological benefits of exercise to achieve the best boxing has a practical significance to provide guidance. Physical exercise and improved mood very close relationship. Most studies show that one-time long-term physical exercise and physical activity can produce good mood benefits. One-time physical activity is duration of about 30 minutes of exercise. Long-term physical exercise is carried out daily activities or exercise regularly, and this longer duration exercise activities, generally for 10 to 12 months.

3.1 After Tai Chi exercise activities instantly emotional effects

3.1.1 Improve the mood state
State of mind is a whole mental activity was affected with a certain color, weak and lasting emotional state. Mood is divided into the positive and negative, positive mood good help increase efficiency, to overcome difficulties; negative mood is depressed people, and reduced efficiency. The dynamic equilibrium theory of mood: the individual is often inclined to maintain the level of their mood state the characteristics of a stable level, a process known as the mood of the “dynamic equilibrium model”. The mood to force balance theory expounded the mood to balance mechanism and imbalances mechanism. In this study, introspection of mood for students according to five levels of the content of their mood state out of self-report to examine the students to learn Tai Chi exercise at different stages of learning during the change of mood, to help physical education teachers at different stages in the teaching of students to master the psychological changes in the characteristics, help to improve learning efficiency. In this study, introspection of mind for students according to five levels of the content of their state of mind out of self-report to examine the students to learn Tai Chi at different stages of learning during the change of mind, to help physical education teachers at different stages in the teaching of students to master the psychological changes in the characteristics, help to improve learning efficiency. This study confirmed the different stages of learning, different changes in mood, but the overall trend is towards the positive direction, to a certain extent, support the dynamic equilibrium theory of mood. During the study before class, in class, after class state of mind can be seen from the histogram of mood changes.

![Figure 1](image)

The first is the pre-class, test the foundation mood, the second test just after class, the subjects by learning new technologies, generate fresh, psychologically get the feeling, so the mood toward the positive development. The third test is after six classes, because a large number of technical movements and actions more difficult to learn, students begin to master the action inconsistent, inaccurate,
accuracy reduced, not the successful completion of technical movements, mood scale scores decreased, mood towards negative changes. Reduced to a minimum, and then slowly picked up recovery. The fourth test is the twelfth time after class, with the increasing number of exercises, mood toward the positive direction. To study the end of the fifth test, the state mood more than the level before the first class. Mainly through the study subjects, learning the techniques to master the skills, the psychology of pleasure, excitement, increased self-confidence. In addition, with learning the passage of time, the students to know the deepening of Tai Chi exercise, especially after the Tai Chi exercise mental condition show has risen in a spiral.

3.1.2 Good emotional experience

Good sense of psychological self-called “feel good” phenomenon refers to actively participate in physical exercise on some excitement, confidence and self-esteem and attitude experience emotion, and no negative feelings. Students self-report mood that Tai Chi exercise with a good sense of the psychological self. Psychological well-being and self Tai Chi exercise movements are correlated with the reduction of negative emotions are closely related. Not actively participate in Tai Chi exercise than an active participant in self-evaluation of positive feelings and this may be due to Tai Chi exercise have heart happy and fun results, the tendency may be invested. Tai chi exercise have a positive impact may be caused by physical, psychological and social, or the combined result of all three.

3.2 Long-term emotional effects of Tai Chi exercise

3.2.1 Tai Chi exercise can produce good mental health effects

Using SCL-90 scale for two tests: The first time was 184 students in the beginning of the first teaching; the second is a year later checks. Persisted in Tai Chi exercise up to a year, ≥30 min/time, ≥2 times/week, a total of 30. Exercise group had not called the 82 students not to participate in Tai Chi exercise. Table 1 shows the students persisted in Tai Chi exercise SCL-90 positive items, never exercise were significantly lower than students. If SCL-90 of each symptom factor (at least one) ≥ 3 for the community, whether students into abnormal psychological reaction, the reaction of long-term practitioners of psychological abnormality detection rate was significantly lower than the students do not exercise. To further explore the study of mental health, the study of SCL-90 of the factor for comparison. Single factor analysis found that long-term Tai Chi exercise practice in mental health status of college students significantly better than non-practitioners, mainly in the somatization, depression, anxiety, terror, mental illness, suggesting that persisted in Tai Chi exercise can have good psychological health effects.

<table>
<thead>
<tr>
<th>Table 1 Comparison of SCL-90</th>
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<tr>
<td>All subjects (n=184)</td>
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<tr>
<td>Somatization</td>
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<tr>
<td>Force</td>
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<tr>
<td>Relationships</td>
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<td>Depression</td>
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<td>Anxiety</td>
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<td>Hostility</td>
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<td>Terror</td>
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<td>Paranoid</td>
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<tr>
<td>Psychotic</td>
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<tr>
<td>Other</td>
</tr>
</tbody>
</table>

(* = P<0.05)

As we all know, Tai Chi exercise is the basis of Tai Chi philosophy, emphasizing awareness of breathing, body to ease the movement of pine quiet way. Because Tai Chi emphasizes awareness to guide practice, and strive to relax the muscles, pay attention to body and mind, to achieve “meaning” of ecstasy. Students early in the Tai Chi exercises to practice basic skills and technical action-based, simple repetition of physical exercise makes the body produce the symptoms and not meet the response characteristics of Tai Chi exercise movement is not affected by students prefer. Therefore, the beginning of training students to practice difficult to feel the pleasure of training, experience mood Tai Chi exercise, the results of the performance of somatization, anxiety, paranoia and other symptoms. With the technical movements of Tai Chi exercise master and skilled technology, especially for the gradual understanding of Tai Chi philosophy, then students in practice one can understand the physical and mental situation, make adjustments and to eliminate negative sentiment, resulting in relaxed, happy feeling. According to the results of the survey, Tai Chi exercise and the other sports activities, long-term practice to anxiety and depression, bad mood state has a significant regulatory role. It’s also beneficial to hostile, psychotic symptoms and other adverse psychological adjustment and mitigation. Tai Chi exercise is a moderate-intensity exercise, students engaged in training can effectively regulate and mitigate the adverse psychological symptoms, reduce the incidence of abnormal psychological reactions. Physical education in colleges and universities, to carry out targeted Tai Chi exercise, a purpose and a plan to guide students to Tai Chi exercise, real implementation, the implementation of the quality of education in physical education goals are recommended. In addition to long-term Tai Chi exercise with the mental health benefits, the benefits of its performance in the emotional stability of anxiety and depression treatment. Tai Chi exercise movement within the outer static stress, balance yin and yang, yin and yang in the body tends to balance the alternating movement of the process, the
psychological state of imbalance in the corresponding impact factors are also to become more balanced. The effectiveness of mental health training courses with the length increases. A Tai Chi exercise habits of the people through long-term exercise may have learned to explain the different physical feelings, and thus can exercise effectively on their own to relax in order to achieve the best results of exercise. In short, the long-term physical exercise will help enhance physical fitness; mental health has a promoting effect. Therefore, to maintain the psychological benefits of physical exercise and to play a long-term benefit, they must exercise to form a pattern of life and long-term adherence, a habit. But it must be pointed out that the exercise of those different types of physical activity, active load size of the points; exercise different projects; exercise in age, underlying health status, personality characteristics, etc. there is a big difference, for a class of person’s exercise program may not be suitable for another person. Although Tai Chi exercise has the potential psychological benefits of physical activity to obtain better, but still have to analyze specific issues, the person should be possible to make the exercise of those physical and mental health developments.

4 Conclusion

4.1 As can be seen from the above analysis, the use of Tai Chi exercise on psychological improvement is effective, so that students receive a comprehensive physical and mental development. This fully shows that the use of the university’s outstanding heritage of Chinese traditional culture, mental training for college students is feasible, is to develop an effective way of psychological quality.

4.2 To teach Tai Chi exercise, exercise the ultimate goal is to explore the fitness value of Tai Chi exercise, fitness approach to students, to develop fitness habits.

References