

# A Case Study on Balloon volleyball Research of Emotional Affection in Different Group of the Universities

—Based on GuangXi Normal University for Nationalities

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*Abstract:* - This paper presents the case study on volleyball research of emotional affection in the different group of the universities. It evaluates three primary methods which are documentation method, test method, statistical research method. It concludes that, the long-term volleyball participates have positive mood affection comparing with others. It plays a good role in promoting physical and mental calm.

*Key-Words:* - Volleyball Research, Emotional Affection, Different Group People, Statistical Research, Documentation Research, Emotion Regulation

## 1 Introduction

Emotion produces the special attitude towards the cognitive content of consciousness accompanying by the cognition and the consciousness. It is a subjective experience and feelings on objective things. Therefore, emotion influences people's behaviour through a large extent. Healthy emotion plays an active role in promoting human behaviour. Moreover, the bad emotion which tends to impede the actions of people plays a negative function. With consistently negative emotions can decrease the body's immune function, which directly or indirectly affects the body's physical and mental health.

Studies have shown that sports playing a good role in promoting people's negative emotions [1, and 8]. However, different forms and ways of movement are not the same effectiveness for different types of bad emotions influence. Balloon volleyball is a set of Chinese original sport fixing fitness, competitive antagonism and recreation. After nearly 30 years' development, and now in Shanghai, Jiangsu, Zhejiang, Fujian, Hunan and other provinces, it carries out extensively, and has a very profound mass foundation in universities and societies.

For this reason, this paper focuses on researching that balloon volleyball, which has a higher participation in colleges and universities in GuangXi, influences emotional experience of different ages to participate in the crowd in colleges and universities. In this case, we can understand better balloon volleyball, so as to provide the scientific basis that it is a better serve of balloon

volleyball for college teachers and students' physical and mental health services.

## 2 Proposed Method

This study selected 40 balloon-volleyball players enthusiasts in GuangXi Normal University for Nationalities (20 males, 20 females) and 40 Lecturers and administrative staff (17 males and 23 females) as research objects. The average age of students group is 20.8 years old, and average age of lecturers is 48.3 years old. Research objects play balloon volleyball is length of up to 13, the minimum is 5 months.

## 3. Methodology

This section presents the proposed method, which is documentation method, following by discussing the mathematical statistics methods and Physiological fatigue scale-analysis.

### 3.1 Documentation method

By retrieving "the Chinese periodical full-text library", we look up related aspects of more than 30 papers published in recent years, laying the theoretical basis for this paper.

### 3.2 Interview

Through the interviews, we understand that balloon volleyball sports participants make the positive emotions, which provides the basis materials for the paper.

### 3.3 Scale for measuring method

Selecting Rrjrski, and Gauviu [2,6 and 7] of “the EFI questionnaire” compiled by “the exercise-induced mood questionnaire” as the measurement tool [2], the scale is divided into dynamic stimulation, physical and mental calm, physical fatigue, active input in 4 scales, each component of table 3-question, a total of 12 entries, which scales better construct validity. Feeling the extent of the scale is from “No” to “very strong” score for a total of 6 standards, its score range is 0-15 points. Scale issue give measuring object after their moving to measure the immediate emotional state, issued a total of 80 copies, recycling 80, 80 valid questionnaires, 100% recovery, 100% efficient, reached the test requirements of research.

**3.4 Mathematical statistics method**

The paper use SPSS FOR WINDOWS13.0 statistical software to analyze all the data. By comparing the T-value of the data and calculating the corresponding P-value, and testing for significant differences, so that research findings is quantified to ensure objectivity and scientific research.

**4. Result and Discussion**

These sections will analysis the result based on the research proposed.

**Table 1: Comparison between Students Group and Staff Group for the Emotional Research**

Physiological fatigue	n	Dynamic excitation	Positive input	Physical	mental calm
Student group (x1±s)	40	2.69±0.09	3.42±0.19	1.23±0.03	3.48±0.18
Staff group (x2±s)	40	4.32±0.21	3.17±0.23	2.72±0.08	4.85±0.09
x1- x2		- 1.63	0.25	- 1.49	- 1.37
t		- 9.38	0.59	- 13.41	- 16.73
p		< 0.01	> 0.05	< 0.01	< 0.01

**4. 1 Dynamic excitation scale-analysis**

Dynamic excitation scale includes 3 factors, which is spirits, energetic, recovery. Statistics show that (table 1), p< 0.01, indicating that the two groups have very significant differences. The results can be understood as staff group are mostly older, because

their bodies’ function progressively decline. Through exercises, they chose some sport to achieve the purpose of promoting the development of physical and mental health. It is all the more reason. Therefore, many physical sports with strong confronting such as basketball, football, have not been very suitable for them. Balloon volleyball belongs to confrontation across the net against difficult injuries, and the intensity and strength can be self-regulation based on the player itself, so it is more suitable for the old aged people. From the interview survey, some participants will feel inspired to the stadium, immediately impulse to play baseball. And such a strong desire and need lead active moods to be effectively strengthened. Moreover, fully mobilize different organs and body systems’ function put the body in a highly positive emotional state, and making people feel energetic, dynamic recovery. However, the student groups, the balloon volleyball sport, unlike that basketball, football, and other physical confrontation are so intense, exciting, and is more like a pure entertainment that is relative lack of competition. So it is difficult to mobilize their enthusiasm to make the emotional experience is not so strong as staff group. In this point, the girls with poor physiological function are higher than boys for dynamic excitation with instant emotional experience, showing that girls are more willing to participate, which is strong interest with no physical confrontation.

**4.2 Physical and mental calm scale-analysis**

Physical and mental calm scale consists 3 factors, which is calm, relaxation and tranquility. Sentiment is the result of objective stimulation from the effects of cerebral cortex activity. The external and internal changes in mood active body is with the linking of multiple levels of function of the nervous system, and the result of cortical and sub cortical central cooperative activities. Exercise can strengthen the heart, improve blood circulation and the metabolism of the digestive system, and it is also enables the brain to obtain sufficient oxygen and nutrients, and can make the excitement of the cerebral cortex and inhibiting calm, so as to achieve the goal of improving poor mood. Participating in sport can provide an outlet channel for bad emotions, imposing the setbacks to a forward momentum. Statistics data shows that in the present study (table 1), student and staff group belong to the moderate level, and the corresponding value p> 0.05, the second group does not have significant differences, so this is in keeping with most sports having a positive

impact on people's physical and mental calm to the conclusion of the study.

#### 4.3 Physiological Fatigue Scale-analysis

Physiological fatigue scale includes 3 factors, which are tired, and weary, and exhaustion. On the 5th International meeting of exercise biochemistry in 1982, exercise-induced fatigue is defined that physiological processes cannot continue its function of the organism at a particular level or cannot maintain scheduled exercise intensity [3]. According to excessive-recovery theory, improving athletic level is an fatigue-recovery-restore-fatigue such a excess recovery process and exercise-induced fatigue in General is a normal physiological phenomenon. Sports offer a physiological fatigue, because of the gradual decline of physical function in the middle-aged, recovery tends to be slow and prone to fatigue after exercise. Statistics show that (table 1), the student group score is 1.23, fatigue is relatively low, and teachers groups has a score of 2.72, appearing as fatigue on a high side,  $p < 0.01$ , these indicate that the two groups have very significant differences. Other researches have shown that, the survey for national old age the balloon volleyball in Fujian, 2005 shows that, incidence of sports injuries of elite male old players is 93.9%, and female is 75.0%[4]. This prompts us, when seniors must be reasonable based on their physical condition and exercise intensity in balloon volleyball sport, strictly controlling the exercise time, and is necessary to make fully warming up before exercises, avoiding or reducing exercise-induced fatigue and injuries due to fatigue.

#### 4.4 Positive input scale-analysis

Positive input scale includes 3 factors, which is passion, happiness, and delightfulness. When people make good perception of an item, they will have a relatively strong demand and aspirations, promoting the power of their behavior. Statistics show that (table 1), student group and staff group actively involved in the scale,  $p < 0.01$ , indicating that both have a very significant difference. This shows that the elderly input more actively than groups of students on balloon volleyball. Because balloon volleyball sport belongs to the project of network isolation sparring, in the practice, speed and power are not a great hit of the elderly, and more balls back and forth, of course, fun. During or after exercise, they will have a strong sense

of joy, good mood and accompanying laugh. In the course of exercising, laughing is a multifunctional body movement, laughing can build good psychological environment, elimination of adverse psychological mood and rebuilding balance [5]. Psychological emotions of pleasure are the healthiest, happiness can make people relax tension, and have a sense of satisfaction and fulfilment. For numbers of students, contacting table tennis for most of them is not long, and controlling the ball is not well enough, Therefore, balloon volleyball's fun is not experienced, leading to their positive emotional experiences less strongly than the middle-aged.

## 4 Conclusion

Research Statistics show that balloon volleyball exercise have a positive impact on the instant mood of different age groups to participate in the crowd, especially the elderly can produce good emotions induced, and inspire their vigour, so that they are passionate. Balloon volleyball for the students involved in the emotion of the crowd is relatively low, the reason for this may be due to the project itself lack of adversarial. In addition, the Balloon volleyball sports for different age groups play a good role in promoting physical and mental calm. But for a long time, it can cause physical fatigue, so the middle-aged should pay attention to maintain reasonable and appropriate exercise intensities, avoiding exercise-induced fatigue and injury.

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