ISSN: 0974 - 7435

2014

# BioTechnology

An Indian Journal

FULL PAPER

BTAIJ, 10(15), 2014 [8886-8890]

Study on the scale of Chinese kungfu athlete willpower quality evaluation based on four factor model

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# **ABSTRACT**

In recent years, with the rapid development of the economy. The development of sports gradually lead the development trend of the times today. Especially in the sport of Kungfu free combat by more and more people of all ages gradually. Now on how to enhance the awareness of the quality of Chinese Kungfu free combat athletes become one of the hot research topics in sports industry. This paper on the four factor model based on the will of the quality evaluation of Chinese Kungfu free combat athletes scale was investigated. At the same time, firstly give a relevant summary to willpower quality, and then draw support from expert interview, open questionnaire survey and the investigation to our country's Kungfu free combat athlete, to establish the four factor model of our country's Kungfu free combat athlete, so that to compile to the evaluated form of it, finally, analyze to the result.

# **KEYWORDS**

Our factor model; Kungfu free combat athlete; Willpower quality; Evaluated form.

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## INTRODUCTION

Nowadays on this century, Kungfu free combat, as one of our traditional physical activities, is becoming more and more with people. This art of attack and defense project full of Chinese Characteristics, all of its optional actions completed with the help of the will of the project. Therefore this article based on China's Kungfu free combat athlete willpower quality evaluation of four factor model of the scale of research and analysis has certain economic value and practical significance. Generally speaking, the essence of the so-called willpower is a matter of the will, mainly by virtue of people's consciousness, and the action to be regulated, and the difficulties are overcome, a process of psychological process on the intended purpose of the implementation of the. For Kungfu free combat athletes, independent, decisive, self-control and strong play the main force of will.

Independence is mainly based on the actual situation of their own, often has a subjective consciousness, is not subject to any outside influences, and a means to an end. And decisiveness is mainly once in dilemma, the situation of a certain judgment, and the associated action, and then quickly make related decisions. Self - mainly in the interference and influence outside, can control the self-conscious about their emotions and action, and its strong play is to face their ultimate goal, Don't give up and always maintain high spirits and unremittingly.

In a word, the will quality for Chinese Kungfu free combat athletes, for its the success of the games have a certain positive influence extent, so in order to make the China Kungfu free combat Athletes' success, we should develop Chinese Kungfu free combat athletes will quality.

# THE RESEARCH SUBJECT AND METHOD

### The Research Subject

This paper in the four factor model of will quality evaluation of Chinese Kungfu free combat athletes were studied based on the scale at the same time, the main object of study selected 500 active Kungfu free combat athletes China avant-garde police free combat Team, the Beijing Sport University, Beijing Sport University undergraduate of Kungfu free combat Team, Hangzhou Institute of sports teams and professional students as well as the Kungfu free combat Shandong Province martial arts the school team and several other units. 500 Kungfu free combat Athletes' gender, grade, home address, age and other conditions such as shown in TABLE 1.

gender	•	Sports grade				Home	address	Age	
Male	Female	Wuying class	Class 1	Class 2	Below class2	Rural	City	Age	Standard deviation
400	100	50	150	200	100	300	200	21	3.2
80%	20%	10%	30%	40%	20%	60%	405		

**TABLE 1: The Basic Data of 500 Kungfu Free Combat Athletes** 

#### The Research Method

In this paper, based on the four factor model will quality evaluation of Chinese Kungfu free combat athletes scale was investigated. At the same time, by means of questionnaire survey, expert interview to open and Chinese Kungfu free combat athletes were investigated, of Kungfu free combat athlete willpower quality of sports psychology experts, sports measurement and evaluation experts, Excellent free combat coaches and national free combat referees related interviews and questionnaires, and in the open questionnaire survey. Survey of 100 Kungfu free combat Athletes of Kungfu free combat Team of Beijing Sport University; finally take the enclosed questionnaire survey of 500, a total of 500 questionnaires issues, after investigating questionnaires recovered all. The success rate is 100%

Tool in the preparation process, we must first determine the questionnaire dimension theory, and the source of the topic are determined, in general, will quality of China Kungfu free combat Athletes in the course of actual measurement, situation behavior mainly depend on the athletes and their activities were established, in the process of research, mainly related to literature data access, frontal investigation related to athletes, the survey topic is mainly composed of a process of daily training and competition in the difficulties and obstacles, and at the same time, overcome difficulties have made those things and behavior of athletes. In the questionnaire survey, the quality of free combat athletes will often appear in the self-confidence, tenacious, One's fighting spirit soars aloft., attack consciousness strongly, aggressive, initiative, hit point clearly and consciously hardship etc.. The appearance of independent, decisive, self-control and Tenacity are relatively more.

On the basis of the theory of the concept of model working out the questionnaire, the free combat professional professor, Professor of psychology and sports for the measurement of parity Professor Validation, problems in practical screening, preliminary to determine their model, using to the collective way of testing, and with the help of SPSS10fou Windows based on the test data selection problem. With the help of AMOS4.0 software to verify the concept model, and ultimately determine the will quality evaluation will quality structure model and Chinese Kungfu free combat athletes scale.

# The Research Result

Psychological measurement willpower questionnaire Chinese Kungfu free combat athletes learn the quality inspection results, the project in the process of analysis, through the test data, test on the social desirability of pre-control,

degree of differentiation, internal consistency coefficient, he related, item total correlation aspects do main analysis, and through the weight transfer and delete, the subject to do the main determined, and based on the psychometric requirements related to the topic, each component has a good reliability.

Will quality of Chinese Kungfu free combat Athletes in the actual process of the questionnaire test validity, content validity in the actual study, mainly through the questionnaire to modify and evaluation from experts, the measurement of the content of assessment basically, and reflect the content, the effect is relatively high. In the course of analysis on the causes of Kungfu free combat athlete willpower questionnaire some validation, as shown in TABLE 2, the structure validity of the questionnaire is relatively good.

TABLE 2: China Verification of Kungfu Free Combat Athlete Willpower Quality Structural Validity Of The Questionnaire (N=200)

Model types	X <sup>2</sup> /df	TLI	CFI	RMSEA
Four factor type	1.540.88	0.88	0.90	0.05

As the questionnaire of China Kungfu free combat athletes volitional quality shows that the four factors model is not only can work as a analysis model, but also has a relatively high stability. While in the recycled aggregation checking process of China Kungfu free combat athlete volitional quality cross sample validity, its reliability standard has an expected effect. The TABLE 3 is the result of rechecking to China Kungfu free combat athlete volitional quality every dimensionality inner consistency.

TABLE 3: The Result of Rechecking to China Kungfu Rree Combat Athlete Volitional Quality Every Dimensionality Inner Consistency.

Scale	Amount of people	Question number	A clone of Bach coefficient
SC scale	300	9	0.7732
WQ scale	300	7	0.6068
GG scale	300	9	0.77
DZ scale	300	11	0.77
SUM scale	300	33	0.9078

However, in the second checkout of China Kungfu free combat athlete volitional quality cross sample validity,  $X^2$ /df, TLI, CFI, RMSEA all of them have a better standard of goodness of fit. As the TABLE 4 shows.

TABLE 4: The Questionnaire Quality of China Kungfu Free Combat Athlete Volitional Quality Structure Formula Model Analysis. (N=300)

Model Types	X <sup>2</sup> /df	TLI	CFI	RMSEA
Four factors model	1.540.88	0.88	0.90	0.05

The demonstration validity of Kungfu free combat athlete volitional quality assessment questionnaire is mainly depends on the real influence to athlete which comes from theirs coach, score for the athlete volitional quality total scores and their coach's given evaluation to some degree, then get the certain validity coefficient. The TABLE 5 is free combat athlete volitional quality total scores and their coach's given grades validity examination.

TABLE 5: Free Combat Athlete Volitional Quality Total Scores and Their Coach's Given Grades Validity Examination.

Scale	correlation Coefficient	Coaches scores	Number
	Person Correlation	0.548	0.041
Volitional quality soores	Sig (1-tailed)	51	0.041
Volitional quality scores	Spearman's rho	0.607	0.032
	Sig (1-tailed)	51	

According to the comparison between talented Kungfu free combat athlete volitional quality and non- Kungfu free combat athlete volitional quality, we got the TABLE 6.

TABLE 6. The Development Level of Kungfu Free Combat Athlete Volitional Quality and Non-Kungfu Free Combat Athlete Volitional Quality.

	Sports Level	Average	Standard deviation	Signification
Self-control ability	Non-talented	27.2995	5.0601	
	Talented	31.3824	4.3186	0.001
Tenacity	Non-talented	23.8836	4.0286	
	Talented	25.323	3.3077	0.003
Decisiveness	Non-talented	25.79.1	4.5753	
	Talented	28.2066	3.8380	0.001
Independence	Non-talented	36.4788	6.0567	
	Talented	39.2458	5.1388	0.001

## FOUR DIMENSIONS IDENTIFY THE WILL

- (1) Self-confidence dimensions: elite athletes cope with the fierce competition, the pressure on the status quo confirm their athletic ability and athletic potential, their prospects, comeback ability in adversity and four aspects conviction and judgment is high than future non-elite athletes.
- (2) Tenacious dimension: the adhere ability with difficulty in dealing with the game, persistent of training objectives and against ability for violent attacks on opponents of elite athletes was significantly higher than non-elite athletes. Comprehensive analysis, tenacious resistance is a must-have basic psychological foundation for Sanda a athlete which is a common feature of Sanda athletes, which will be eliminated without tenacious resistance.
- (3) Bold dimension: Excellent athlete suffered opponent after KO fail miserably, again face the same opponents, the exhibited courage and guts of beat and did not hesitate to make a choice when faced difficulties in training and competition and everyday life,, seize the opportunity to attack decisiveness fierce resistance in both parties, and take action timely, courage to face strong opponents during sex, race training accidents (such as a sudden change in tactics opponent he suddenly suffered heavy blow etc. act when) the timeliness and correctness of the five areas than non-elite athletes.
- (4) Morale dimension: the attack awareness to KO opponent when the opportunity appeared, ferocity hitting each other, proactive offensive momentum, determination to fight when faced challenges, painful blow to your opponent, strong counterattack awareness under allowance to continue the game during the countdown after attacks by opponents, elite athletes is significantly higher than the non-elite athletes.

#### DISCUSSION AND ADVICE

Generally speaking, to win the competition, China Kungfu free combat athletes must have stronger volitional quality in the practical race, and develop all of individual abilities. This study indicates that the path coefficient of the four factors are 0.92, 0.83, 0.82, 0.83.

In the Self-control ability dimensionality of Kungfu free combat athletes, it's a handling to the pressure of fierce competition, and use their won competitive ability in order to get a win instead of losing. While in the tenacity dimensionality, it is common that talented sportsman will meet some difficulties, as long as they keep going. Meanwhile they have a persistence in the training. Decisiveness means once they get into trouble. Athletes, of course, will make quick decisions to these difficulties. For independence, which is mainly depends on theirs practical condition, nothing can effect it.

In conclusion, China Kungfu free combat athletes must have stronger volitional quality is mainly based on the four factors model, while the questionnaire quality of China Kungfu free combat athlete volitional quality has a better reliability, validity and structure validity. In the assessment of future, it is better to strengthen China Kungfu free combat athlete volitional quality and support athlete with relevant mental measurable standard.

#### **CONCLUSION**

With the rapid development of the economy, China Kungfu free combat athlete volitional quality has become one of the focus of the sports circles. At the same time willpower factor as one of the important psychological factors of Kungfu free combat athletes, there is a positive effect of direct significance for the athlete's athletic ability and competition in a certain degree of success. Then in this special PE game, we should make scientific evaluation on Kungfu free combat athlete willpower. In daily training, develop appropriate training in willpower in order to increase theirs volitional quality, and lay the foundation for the future success of the competition.

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