

Correlation between Personality Traits and Achievement Motivation in Chinese Wushu Athletes

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Abstract: *The purpose of this study was to find out the correlation of personality on achievement motivation in case of Chinese Wushu athletes. **Methods:** 150 Chinese professional Wushu athletes (aged 18-25) were randomly chosen to find out the correlation of personality on achievement motivation. The Sixteen Personality Factor Questionnaire and Individual Difference in Achieving Tendency Questionnaire were used to identify personal traits and achievement motivation. **Results:** Both genders (male and female) in Taolu had the same rule-consciousness personality correlated with the achievement motivation. Besides, there was a similar correlation in reasoning and rule-consciousness personalities between Taolu and Sanshou in female athletes (not reported in male) on achievement motivation. **Implications for another personality on achievement motivation in male and female were reported. Personality plays important role in the different of Wushu contents (Taolu and Sanshou) as well as in genders (except the rule-consciousness and reasoning). Female Wushu athletes had more complicated in personality traits which correlated with achievement motivation than male athletes.***

Keywords: Achievement Motivation, Chinese Wushu athletes, Personality traits, Sanshou and Taolu contents.

1. Introduction

Wushu is a modern exhibition of traditional Chinese martial arts which divides in two categories such as Taolu and Sanshou. Taolu involves martial art patterns and maneuvers, which given points under the specific rules with many movements such as kicks, punches, jumps, sweeps, throws, etc., While Sanshou (or Wushu Sparring) is an unstoppable martial art fighting method with bare hands in real-life combat. Besides, Wushu is the direct-encountered sport, thus mental stressful is one of the nature of Games. In a very short time, athletes have to decide the right and accurate actions; Therefore, in order to win a competition, they have not only a mastery techniques, good tactics or high physical fitness, but also need a good respond mentality which has the close relation to their personalities (Corr & Matthews, 2009). Personality refers to individual differences in characteristic patterns which define as the set of habitual behaviors, cognitions and emotional patterns that evolve from biological and environmental factors (Cattell, 1989). Moreover, the influence of an individual's need and motivation has a strong impact on the direction of their behavior (Rabideau, 2005).

In Wushu, the highest aspiration is unlimited power and mastery technique turning to a preminent hero. In sport psychology aspect, it was called the achievement motivation. David McClelland's research into achievement motivation noted that one characteristic of achievement motivated athletes is that they see to be more concerned with personal achievement than with the rewards of success (McClelland, 2015). He believed that athletes did not reject rewards but rewards were not essential as the accomplishment itself. According to Atkinson indicated that athletes in competition

had two main motivations such as achieve success and avoid failure (Atkinson, 1964). The motive to achieve success is determined as the need to succeed, the person's estimate of the success in performing the particular task and the incentive for success. While the motive to avoid failure is determined as the same points in achieve success which turn to failure. Furthermore, the one who needs to reach the perfect state of motivation, its self-motivation needs to be concerned as the purpose of competition goals. Therefore, there was an important meaning (in theoretical and practical skills) to find out the specialized personalities of athletes in competition and the correlation of these personalities on achievement motivation (in this study was the case of Chinese Wushu athletes), which may lead to find out the good way in the athlete selection process, training tendency and management.

2. Research Methods

2.1 Participants

The samples size of the study was 150 Wushu professional athletes at Shanghai Sports Academy (Taolu content included 35 females and 45 males, while Sanshou content with 30 females and 40 males) who were randomly chosen in Wushu team (aged 18-25). All participants finished the questionnaire on court before training.

2.2 Materials

The Sixteen Personality Factor Questionnaire (16PF) was established by Cattell through a questionnaire study about the personality and human behavior (Cattell, 1946). Sixteen factors (about 187 questions) in personality were

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independent each other and the correlation among them were minor. They are Warmth (A), Reasoning (B), Emotional Stability (C), Dominance (E), Liveliness (F), Rule-Consciousness (G), Social Boldness (H), Sensitivity (I), Vigilance (L), Abstractedness (M), Privatness (N), Apprehension (O), Open to change (Q1), Self-reliance (Q2), Perfectionism (Q3), and Tension (Q4). Each factor has two tendencies such as high and low range (Conn & Rieke, 1994). Besides, each question had three levels of grade for evaluation.

Individual Difference in Achieving Tendency Questionnaire (IDIAT) by Mehrabian & Bank (1978) based on the scale about the personal achievement motivation of Atkinson with 38 items comprised achieve success and avoid fail was used to identify the achievement motivation. Using 9-scale of Likert from “completely agree” to “almost disagree”. Each question had 9 levels of grade. The total achievement motivation in wining was the grade of “achieve success” minus the grade of “avoid fail”. The higher points you got in “total motivation”, the better achievement motivation you were. Because the participants were Chinese athletes, we used the questionnaire from Zhangli (2010) who translated to Chinese for evaluation with strongly reliability.

2.3 Statistical analysis

Data were collected in four different times which separated in genders and Wushu contents such as female Taolu, male Taolu, female Sanshou, and male Sanshou. Pearson correlation (r) was used to identify the correlation of personality on achievement motivation which was reach at least 0.4 or upper for evaluation (as the modest correlation or higher) (Cohen & Holliday, 1982). Data were analyzed using the statistical package for social science program (SPSS for Windows, version 20).

3. Results and Discussion

In male Wushu athletes, the correlation of personality traits on achievement motivation in Sanshou (Table 1) indicated that the sensitivity of male Wushu Sanshou athletes had a negative correlation with the achieve success (-0.413) and total motivation (-0.435), while the self-reliance had a positive correlation with the achieve success (0.509) and total motivation (0.436). The rest of correlation in Sanshou content did not make sense. Besides, the correlation of personality on achievement motivation in Taolu (Table 1) showed that only the rule-consciousness of male Wushu Taolu athletes had a negative correlation with the achieve success (-0.4). The others had low correlation which eliminated to point out.

In female Wushu athletes, the correlation of personality on achievement motivation in Sanshou (Table 2) reported that the reasoning and emotional stability have negative correlation with the total motivation (-0.456 and -0.419 respectively), the vigilance had a positive correlation with the achieve success (0.414), the rule-consciousness had a positive correlation with the avoid fail (0.594) which took an opposite side to the achieve success (-0.458) and total motivation (-0.612), the apprehension has a negative correlation with the avoid fail (-0.484) but it showed the positive correlation with the achieve success (0.413) and total motivation (0.521). The rest did not make sense or low correlation in Sanshou content. In line with the Taolu content (Table 2), the correlation of personality on achievement motivation showed that the reasoning and rule-consciousness had positive correlation with the avoid fail (0.426 and 0.44 respectively), as well as the privatness with total motivation (0.507). The rest correlation in Taolu content had low correlation which did not make sense.

Table 1: Correlation between personality and achievement motivation in male Wushu athletes

Personality traits	Achievement Motivation in male Wushu athletes					
	Sanshou (n=40)			Taolu (n=45)		
	Achieve success	Avoid fail	Total motivation	Achieve success	Avoid fail	Total motivation
Warmth	0.102	-0.069	0.119	0.009	-0.012	0.019
Reasoning	-0.102	0.366	-0.330	0.005	0.384	-0.376
Emotional Stability	-0.138	0.173	-0.218	-0.126	0.203	-0.298
Dominance	-0.052	0.061	-0.079	-0.125	-0.333	0.234
Liveliness	0.095	0.081	0.008	0.023	0.065	-0.047
Rule-Consciousness	-0.192	0.206	-0.280	-0.400	0.032	-0.339
Social Boldness	-0.014	-0.138	0.088	0.098	0.140	-0.064
Sensitivity	-0.413	0.209	-0.435	0.308	0.110	0.128
Vigilance	-0.010	0.228	-0.168	-0.131	-0.275	0.171
Abstractedness	-0.022	0.235	-0.182	-0.302	0.019	-0.251
Privatness	-0.220	0.177	-0.278	0.037	0.092	-0.062
Apprehension	0.218	0.114	0.071	-0.353	-0.197	-0.077
Openness to change	-0.268	-0.070	-0.137	0.058	-0.263	0.305
Self-reliance	0.509	-0.115	0.436	-0.015	0.066	-0.076
Perfectionism	0.266	0.070	0.135	0.065	0.115	-0.064
Tension	0.162	-0.003	0.115	-0.009	0.017	-0.024

4. Discussions

In male Wushu athletes

The results showed that male Sanshou athletes had negative correlation in Sensitive and positive in Self-reliance personalities with motivation achievement, while in male

Taolu showed a negative in Rule-consciousness. As we knew, male athletes with the low sensitivity personality were the knowledgeable, reality, strong believed, and independent working man. These elements adapted the requirements in Sanshou content; for example, male athletes would quickly respond from the external stimuli with the accurately action

– a direct encountered competition. Therefore, male Sanshou athletes with the low sensitivity always fought against the alteration of competition, increased their maximum speed and cooperation as well as improved the fastest reaction.

They frequently take more time for training to enhance their expectation and obviously they chase the higher achievement.

Table 2: Correlation between personality and achievement motivation in female Wushu athletes

Personality traits	Achievement Motivation in female Wushu athletes					
	Sanshou (n=30)			Taolu (n=35)		
	Achieve success	Avoid fail	Total motivation	Achieve success	Avoid fail	Total motivation
Warmth	0.188	0.129	0.029	-0.198	0.066	-0.212
Reasoning	-0.393	0.393	-0.456	0.387	0.426	-0.076
Emotional Stability	-0.383	0.341	-0.419	-0.039	0.211	-0.217
Dominance	0.168	0.116	0.025	-0.300	0.065	-0.290
Liveliness	-0.096	0.098	-0.113	-0.075	0.255	-0.284
Rule-Consciousness	-0.458	0.594	-0.612	0.063	0.440	-0.341
Social Boldness	-0.309	0.220	-0.305	-0.026	-0.045	0.020
Sensitivity	-0.364	0.219	-0.335	-0.165	0.013	-0.140
Vigilance	0.414	-0.244	0.379	-0.003	0.125	-0.113
Abstractedness	-0.144	0.274	-0.245	-0.108	0.137	-0.205
Privateness	0.200	-0.309	0.297	0.202	-0.395	0.507
Apprehension	0.413	-0.484	0.521	0.062	-0.223	0.246
Openness to change	-0.151	0.249	-0.233	-0.185	0.044	-0.183
Self-reliance	0.116	0.195	-0.051	-0.106	-0.331	0.211
Perfectionism	-0.103	0.211	-0.184	-0.138	0.298	-0.371
Tension	0.124	-0.236	0.210	0.021	0.164	-0.129

Besides, male Sanshou athletes with the high self-reliance personality have known how to complete the task by themselves, work independent in training or competition. This kind of personality in male athletes can do everything with their best to win the Game which appropriate to the Sanshou content of Wushu. In the other words, the more self-reliance athletes are, the higher achieving success they chase. Thus, the achievement motivation in these athletes was higher than the others in Sanshou. Male Taolu athletes had a negative correlation between rule-consciousness achieve success. Thus, male with the low rule-consciousness personality had a higher desire to be the best. Although it showed that they had a low ambition and less effective, but they know how to set the short time to reach purpose which answer for this correlation in male Taolu athletes. Clearly, this kind of personality trait will find the short way to reach the high achievement in competition.

In female athletes

Our results also demonstrated the female Wushu motivation achievement which took many correlations with their personalities. Reasoning personality trait was the first correlation that took the negative way to motivation achievement. It indicated that the low reasoning in female Sanshou athletes were, the more motivation they were. The answer for this correlation because most of female Sanshou athletes in this study were at college aged (18-22 years). Therefore, it was not surprisingly that they had a weak critical thinking. The reason may come from the time which they spent in training higher than in studying. However, all of them had at least 3 years to be a professional Sanshou athletes or more, therefore, it led their skills be automatic reflection. Being professional athletes in Sanshou, they sometimes took an action automatically in defend or offend in a very short time but accuracy (as their confirmed). It was not strange to indicate that female athletes with the low reasoning personality have a high total motivation who took a react simply in competition but the efficiency was high. As

well as female with the low emotional stability have a high total motivation in Sanshou. The reason comes from the nature of Sanshou competition. They were impatient or overexcited; however, this personality trait was the psychological quality of any female athletes in competition (especially in 1vs.1 game). Halim & Zainal (2015) noted that emotional stability personality had a directly influence to job performance which explained this correlation in our study. Besides, they varied from the techniques using in fighting or making confusion to opponent - the way to win the Game. Clearly, their motivation had a negative correlation with the emotional stability personality.

Moreover, female athletes with the high rule-consciousness personality usually take the training everyday with their best. In the other hand, they never give up or may suffer any high pressure during Sanshou competition. Therefore, this personality had a high achievement motivation in the achieve success with many ambitious goals and hardly effort. In short, it answered the reason why rule-consciousness personality had a positive correlated with their chasing success, motivation and a negative one with the avoid fail.

Individuals with the low vigilance personality were the easy one, no doubt or less compete with the others. In Sanshou, this kind of personality cannot become a professional athlete. The high vigilant personality in female Sanshou athletes fight against all the responses from the opponent. Therefore, female with the high vigilance personality easily reach the high performance as well as corresponding with their achieving success. According to Neigel et al. (2017) noted that individuals with high achievement motivation showed more critical signals and less false alarm. Their result is quietly similar to our study. The more vigilance you are, the more fighting and response you have. It leads you become success and sometimes makes you feel lonely which vary in achievement motivation related to vigilance

performance. As we knew, female with low apprehension personality are relaxed and peaceful one. They are self-confident hardly shake their moral and ability in solving the problems. They have a faith to reach all purposes and avoid the fail as well as a tendency to reach a high achievement (as achieve success) in order to prove their ability to the others.

Taolu involves martial art patterns and maneuvers which given points under the specific rules. The importance in Taolu training depends on the ability of performing as much complex movement in time, good balance and accuracy. All actions had to be set up and fixed condition before competition. Therefore, athletes need to be trained over and over again to reach the perfectly beautiful movement. We believed that the more reasoning in female Taolu athletes were, the more achievement they reach. Moreover, the role of female in the Democratic social had a self-opinionated tendency, the reasoning female does not accept in avoiding failure. Besides, Taolu female with the high rule-consciousness was the patience, active and responsibility ones. They always accomplished training tasks with their self-awareness as well as do not need any helping to create the confident in Taolu competition. Clearly, Taolu females with high rule-consciousness had a positive and high in avoiding failure. Moreover, Taolu females with the high achievement motivation were related with the privateness personality. From the view of life, a privateness personality had a difference point with the others. They did not talk much, although they had high demands on themselves, dare any mistakes and had ability to work independently. They tried to reach the best achievement in competition with maximum effort. Therefore, it had more than a reason why the privateness had apposite correlation with the total motivation in this study.

5. Conclusion

In case of Chinese Wushu athletes, both gender (male and female) in Taolu had the same rule-consciousness personality correlated with the achievement motivation, although it showed the negative correlation with the achieve success in male while the positive correlation with the avoid fail in female. This was not in line with Sanshou which the correlations were not similar. Besides, there was similar correlation in reasoning and rule-consciousness personalities between Taolu and Sanshou in female athletes (not reported in male) on achievement motivation. However, the reasoning personality, which had a positive correlation with the avoid fail in Taolu but took a negative correlation with the total motivation in Sanshou. Clearly, personality plays important role in the different of Wushu contents (Taolu and Sanshou) as well as in genders (except the rule-consciousness and reasoning). The finding of this study indicated that female Wushu athletes had more complicated in personality traits which correlated with achievement motivation than male.

Competing interests

Both authors declare that they have no competing interests.

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Author Profile

LTM. Hanh (main author) drafted, wrote down, and revised the manuscript while TM. Tuan took a control in revising and editing the manuscript after all. Both authors have read and approved the latest paper of this manuscript. Therefore, we both agreed with the order of the presentation.