



INFLUENCE OF GENDER, NATIONALITY, AND COMPETITION CONTENT WITH THE PERSONALITY FACTORS OF VIETNAMESE AND CHINESE MARTIAL ARTS ATHLETESⁱ

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Abstract:

After using the 16PF Questionnaire (Personality Factor Questionnaire) to measure the motivations of Vietnamese and Chinese martial arts athletes, the study finds out that the factors of Gender, Nationality and Competition Contents have significant influences and high interactions on the athletes' personality factors, such as Emotional Stability, Dominance, Liveliness, Sensitivity, Abstractedness, Privatness and Apprehension. Other personality factors, such as Warmth, Openness to Change, Self-Reliance, Tension, Reasoning, Rule-Consciousness, are also influenced but the interactions are not significant. Meanwhile, the others including Perfectionism, Vigilance, and Social Boldness are not influenced and the interactions are not significant.

Keywords: Vietnamese - Chinese Martial Arts athletes; personality factors; 16PF

Tóm tắt:

Sau khi sử dụng Bảng câu hỏi 16PF (Bảng câu hỏi nhân tố nhân cách) để đo động lực của các vận động viên võ thuật Việt Nam và Trung Quốc, nghiên cứu phát hiện ra rằng các yếu tố Giới tính, Quốc tịch và Nội dung thi đấu có ảnh hưởng đáng kể và tương tác cao đến các yếu tố nhân cách của vận động viên, chẳng hạn như: Tính ổn định về cảm xúc, Sự thống trị, Tính tích cực, Sự nhạy cảm, Tính trừu tượng, Sự riêng tư và Sự lĩnh hội. Các yếu tố tính cách khác, chẳng hạn như: Nhiệt tâm, cởi mở để thay đổi, tự lập, trạng thái căng thẳng, phán đoán, quy tắc-y thức, cũng có ảnh hưởng nhưng tương tác không đáng kể. Trong khi đó, những người khác bao gồm Chủ nghĩa hoàn hảo, Thận trọng và thiếu kiên quyết không bị ảnh hưởng và không đáng kể.

Từ khóa: Vận động viên Võ thuật Việt - Trung; yếu tố nhân cách; 16PF

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1. Introduction

During a martial arts competition, athletes have to conduct a variety of tactics and prompt movements. During such an intense match, an athlete has to make decisions quickly and accurately, about how and when to make powerful and sudden blows that might cause pain, dizziness or even knock-out his/her rivals, all of these can lead to changes and development of athletes' psychological status. Therefore, to win the match, besides good tactical skills, an athlete also needs to have psychologically response skills that relate closely to his/her psychological personal characteristics. The psychological personal characteristics are what a person shows frequently in society, including capability, temper and personality. The forming of the psychological characteristics is relatively stable, but their combinations are not independently, but instead, influenced by personality factors. Therefore, it is essential to understand whether and to what extent the factors such as Gender, Nationality and Competition Contents can affect the personality factors of Vietnamese and Chinese martial arts athletes, in order to improve the psychological training process for martial arts athletes, especially for those of Traditional Vietnamese martial arts team.

2. Methodology

The study applies the following methodologies: 1. Reading and analyzing document method; 2. Professional method; 3. Survey method, in which the IDIAT questionnaire is used to survey Traditional Vietnamese martial art and Chinese Wushu athletes; 4. Statistical method, in which all data are computerized with the 17.0 SPSS software. 134 elite athletes of Traditional Vietnamese Martial Arts (55 are females) and 150 of Chinese Wushu (65 females), from two competition contents: Performing and Combatting, are selected to participate in the research.

3. Result

After interviewing the selected athletes and processing variations, we analyze the factors of Gender, Nationality and Competition Contents via the ANOVA in order to understand how they influence the personality factors of the athletes. The results are as follows:

Table 1: The influences of Gender, Nationality and Competition Content factors on the Emotional Stability of the selected athletes

	Type III sum of square	df	Mean square	F	p
Content	0.045	1	0.045	0.025	0.875
Nationality	0.633	1	0.633	0.348	0.556
Gender	7.406	1	7.406	4.070	0.045
Content × Nationality	0.045	1	0.045	0.025	0.875
Gender × Nationality	0.061	1	0.061	0.033	0.855
Content × Gender	14.584	1	14.584	8.015	0.005
Content × Gender × Nationality	1.180	1	1.180	0.648	0.421

As shown in Table 1, the Gender factor affects significantly the Emotional Stability of the athletes, the interaction of Gender and Content on this personality factor is meaningful; the interaction of the other factors on the stability trait is not meaningful.

Table 2: The interaction of Gender and Competition Content

	(I)	(J)	Mean Difference (I-J)	Std. Error	p
Male	China	Vietnam	-0.353	0.223	0.114
Female	China	Vietnam	0.495	0.261	0.059
Performing	China	Vietnam	-0.359	0.235	0.127
Combatting	China	Vietnam	0.489	0.250	0.052

There is no noticeable difference between males and females. Results for Chinese male athletes are lower than that of Vietnamese; opposite to the case of female athletes. In terms of competition contents, for Performing: the Chinese athlete group is lower Vietnamese one, and for Combatting: the Chinese athlete group is higher.

Table 3: The influences of Gender, Nationality and Competition Content factors on *Dominance* of the selected athletes

	Type III sum of square	df	Mean square	F	p
Content	16.191	1	16.191	7.872	0.005
Nationality	3.556	1	3.556	1.729	0.190
Gender	5.810	1	5.810	2.825	0.094
Content × Nationality	6.465	1	6.465	3.144	0.077
Gender × Nationality	2.887	1	2.887	1.404	0.237
Content × Gender	12.374	1	12.374	6.016	0.015
Content × Gender × Nationality	0.500	1	1.180	0.648	0.421

Competition Content has a significant effect on the selected athletes' Dominance, the interaction of Content and Gender on this personality factor is meaningful; the interaction of the other factors is not meaningful.

Table 4: The interaction of Gender and Competition Content

	(I)	(J)	Mean Difference (I-J)	Std. Error	p
Male	China	Vietnam	0.176	0.241	0.466
Female	China	Vietnam	0.985	0.282	0.001
Performing	China	Vietnam	-0.667	0.254	0.009
Combatting	China	Vietnam	0.142	0.271	0.601

There is no significant difference between Chinese and Vietnamese male athletes, but there is a statistical difference between females: Chinese athletes' scores are higher than Vietnamese. In terms of Competition Content, for Performing: there is a statistically significant difference between the two country groups, in which the Vietnamese group is lower; meanwhile, there is no significant difference in Combatting content.

Table 5: The influences of Gender, Nationality and Competition Content factors on Liveliness of the selected athletes

	Type III sum of square	df	Mean square	F	p
Content	2.745	1	2.745	1.109	0.293
Nationality	2.522	1	2.522	1.019	0.314
Gender	0.396	1	0.396	0.160	0.689
Content × Nationality	1.005	1	1.005	0.406	0.525
Content × Gender	3.087	1	3.087	1.247	0.265
Gender × Nationality	14.569	1	14.569	5.884	0.016
Content × Gender × Nationality	2.900	1	2.900	1.171	0.280

In terms of the influences on Liveliness, the interaction of the nationality and gender factors is meaningful; those of the other factors are not meaningful.

Table 6: The interaction of Nationality and Gender

	(I)	(J)	Mean Difference (I-J)	Std. Error	p
Male	China	Vietnam	-0.101	0.262	0.702
Female	China	Vietnam	0.768	0.308	0.013
China	Male	Female	-0.653	0.277	0.019
Vietnam	Male	Female	0.215	0.295	0.467

In terms of Gender, for male athletes, the difference between the two nations is not meaningful; while, whereas Chinese females score higher than Vietnamese ones with a statistically significant difference.

In terms of Nationality, for the Chinese group, the difference between males and females is statistically meaningful (the score of male groups is lower than that of females); while for the Vietnamese group, the difference is not meaningful.

Table 7: The influences of Gender, Nationality and Competition Content factors on Sensitivity of the selected athletes

	Type III sum of square	df	Mean square	F	p
Content	16.210	1	16.210	3.419	0.066
Nationality	18.495	1	18.495	3.901	0.049
Gender	42.431	1	42.431	8.949	0.003
Content × Nationality	1.485	1	1.485	0.313	0.576
Gender × Nationality	37.922	1	37.922	7.998	0.005
Content × Gender	6.806	1	6.806	1.435	0.232
Content × Gender × Nationality	27.868	1	27.868	5.878	0.016

Table 7 shows that Gender and Nationality have a significant influence on the Sensitivity of the selected athletes. The interaction of Gender and Nationality, and the interaction of Competition Content, Gender and Nationality are meaningful; other factors' interactions are not significant.

Table 8: The interaction of Competition Content, Nationality and Gender

		(I)	(J)	Mean Difference (I-J)	Std. Error	p
Performing	Male	China	Vietnam	0.475	0.478	0.321
	Female	China	Vietnam	2.312	0.543	0.000
Combatting	Male	China	Vietnam	0.065	0.495	0.895
	Female	China	Vietnam	-0.583	0.603	0.334

Table 8 shows that, for the Performing content, the difference between the Chinese and Vietnamese males is not meaningful, but meaningful in the female case (in which, the Chinese females' scores higher than the Vietnamese ones). For the Combatting content, the difference is not meaningful.

Table 9: The influences of Gender, Nationality and Competition Content factors on Abstractedness of the selected athletes

	Type III sum of square	df	Mean square	F	p
Nationality	17.268	1	17.268	7.436	0.007
Content	2.263	1	2.263	0.974	0.324
Gender	5.527	1	5.527	2.380	0.124
Gender × Nationality	0.053	1	0.053	0.023	0.881
Content × Nationality	21.227	1	21.227	9.141	0.003
Content × Gender	0.058	1	0.058	0.025	0.875
Content × Gender × Nationality	2.888	1	2.888	1.243	0.266

Table 9 shows that Nationality has a significant influence on Abstractedness of the selected athletes. The interaction of Competition Content and Nationality is meaningful; other factors' interactions are not significant.

Table 10: The interaction of Competition Content and Nationality

	(I)	(J)	Mean Difference (I-J)	Std. Error	p
China	Performing	Combatting	0.823	0.258	0.002
Vietnam	Performing	Combatting	-0.410	0.273	0.134
Performing	China	Vietnam	0.212	0.257	0.410
Combatting	China	Vietnam	-1.021	0.274	0.000

The scores of Chinese athletes between Performing and Combatting (under Chinese level) are significantly different, but for Vietnamese athletes, the difference is not meaningful. In terms of Content, the difference between Chinese and Vietnamese groups in Performing is not meaningful, while in Combatting, the score of Chinese athletes is lower than that of Vietnamese.

Table 11: The influences of Gender, Nationality and Competition Content factors on Privateness of the selected athletes

	Type III sum of square	df	Mean square	F	p
Content	68.011	1	68.011	27.110	0.000
Nationality	0.498	1	0.498	0.199	0.656
Gender	10.431	1	10.431	4.158	0.042
Gender × Nationality	1.464	1	1.464	.583	0.446
Content × Nationality	19.359	1	19.359	7.717	0.006
Content × Gender	4.545	1	4.545	1.812	0.179
Content × Gender × Nationality	7.005	1	7.005	2.792	0.096

Table 11 shows that Competition Content and Gender influence significantly the athletes' Privateness. The interaction between Competition Content and Nationality is significant; while other factor interactions are not significant.

Table 12: The interaction of Competition Content and Nationality

	(I)	(J)	Mean Difference (I-J)	Std. Error	p
China	Performing	Combatting	-0.863	0.270	0.002
Vietnam	Performing	Combatting	-0.107	0.285	0.709
Performing	China	Vietnam	0.673	0.269	0.013
Combatting	China	Vietnam	1.429	0.286	0.000

For the Chinese group, the score difference between the performing and combatting groups is meaningful; while for the Vietnamese group, it is not meaningful. In terms of Content, the difference between Chinese and Vietnamese groups for Performing content as well as Combatting content is meaningful.

Table 13: The influences of Gender, Nationality and Competition Content factors on Apprehension of the selected athletes

	Type III sum of square	df	Mean square	F	p
Content	4.729	1	4.729	1.580	0.210
Nationality	4.180	1	4.180	1.396	0.238
Gender	0.004	1	0.004	0.001	0.972
Gender × Nationality	0.001	1	0.001	0.000	0.986
Content × Nationality	13.747	1	13.747	4.592	0.033
Content × Gender	2.022	1	2.022	0.676	0.412
Content × Gender × Nationality	0.273	1	0.273	0.091	0.763

As Table 13 illustrates, the interaction between Nationality and Competition Content is meaningful; the other factors' interaction is not meaningful.

Table 14: The interaction between Competition Content and Nationality

	(I)	(J)	Mean Difference (I-J)	Std. Error	p
China	Performing	Combatting	-0.466	0.296	0.117
Vietnam	Performing	Combatting	0.235	0.314	0.453
Performing	China	Vietnam	-0.459	0.295	0.122
Combatting	China	Vietnam	0.243	0.315	0.441

The difference between Performing and Combatting groups of both countries is significant. For the Chinese group, the score of performing is lower than combatting; meanwhile, for the Vietnamese group, the score of performing is higher than combatting. In terms of Competition Content, for Combatting, the difference between the two nations is not significant. In Performing, the Chinese group is lower than the Vietnamese group. In Combatting, Chinese is higher than the Vietnamese group.

As for other personality factors, factors, such as Warmth, Openness to Change, Self-Reliance, Tension, Reasoning, and Rule-Consciousness, are also influenced by Gender, Nationality and Competition Content; but the interactions are not significant. Meanwhile, the others including Perfectionism, Vigilance, and Social Boldness are not influenced and the interactions are not significant.

4. Conclusion

Through processing variations and analyzing ANOVA, the study finds that:

- As for Emotional Stability, Gender is a significant factor. Interaction of Competition Content and Gender is meaningful;
- As for Dominance, Competition Content is a significant factor. Interaction of Competition Content and Gender is meaningful;
- As for Liveliness, the interaction of Gender and Nationality is meaningful;
- As for Sensitivity, Genre and Nationality are significant factors. The interaction of Gender and Nationality, as well as the interaction of Content, Gender and Nationality are meaningful;
- As for Abstractedness, Nationality is a significant factor. Interaction of Nationality and Competition Content is meaningful;
- As for Privatness, Competition Content and Gender are significant factors. Interaction of Nationality and Competition Content is meaningful;
- As for Apprehension, the interaction of Competition Content and Nationality is meaningful;
- Other factors, such as Warmth, Openness to Change, Self-Reliance, Tension, Reasoning, Rule-Consciousness, are also influenced by Gender, Nationality and Competition Content; but the interactions are not significant. Meanwhile, the others including Perfectionism, Vigilance, and Social Boldness are not influenced and the interactions are not significant.

Conflict of Interest Statement

The authors declare no conflicts of interests.

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