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INQUIRY INTO THE COLLEGE TABLE TENNIS ATHLETES' COMPETITIVE BURNOUT AND CONFIDENCE

Abstract

What I wish to show in this paper were: 1. to compare the differences of competitive burnout and confidence of college table tennis athletes with different demographic variables, and 2. to explore the relationship of college table tennis athletes' competitive burnout and confidence. One hundred and fourteen college table tennis athletes (male 63, female 51) were recruited and administered the Competitive Burnout Inventory and the Inventory of Confidence. The material in this paper was analyzed by independent t-test, independent one-way ANOVA, and Pearson product-moment correlation. The following results were obtained: 1. Male athletes had higher scores of "devaluation by coach and teammates", and "confidence" than those of female athletes. 2. National level athletes had higher scores of "psychological withdrawal" than those of national-game level athletes. 3. The athletes who practiced 6-7 days a week had higher scores of "devaluation by coach and teammates" than those of the athletes who practiced 4-5 days a week. 4. There were positive correlations between "confidence" and "the perception of personal sport performance" of competitive burnout, while there were negative correlations between "self-confidence" with "emotional and physical exhaustion" and "negative self concept of sport ability".

Key words: *college table tennis athletes, competitive burnout, confidence*

Introduction

University/ college athletes are the top sports players in our country. As regards, creating a team which represent by a nation, the university or college athletes possess most important status. Therefore, whether sports players continue to join the sports practices will influence the national sports by enhancing the sports status. Gould et al. (1996, 1997) found that the interaction of personal factors and environment will cause burnout. Besides, other study found losing interest in sport and the stress from coaches, parents or teammates are the main factors associated with burnout (Cohn, 1990; Silva, 1990; Weinberg & Gould, 1995). Coping with competitive stress or adjusting emotionally in competitive situations is important for athletes. Smith (1986) considered that burnout and stress were closely related. Since colleges are the foundation training center of great athletes, understanding the psychological experience and development of coping strategies will be important issues for physical education development. Raglin and Morgan (1989) demonstrated that 47% of athletes had the experience of competitive burnout. Athletes express that the reasons for burnout include exacting training, exhaustion, analeptic time is not enough and no responsibility. The development situation of the domestic athlete of college at present, influence it to participate in the main reason why the movement trains continuously, relate to psychological factor mostly (Raedeke, 1998; Raglin & Morgan, 1989). And participate in a great deal of influence athletes in the psychological factor of training or competition continuously, self-confidence is it influence important psychological characteristic that sport display, lack self-confidence is it can cause negative influence to display to sport to consider. Display to successful sports but the speech, and technology is very important at the speed, strength, but lack self-confidence in the contest, will make these relevant factors damaged (Mahoney et al., 1987). Self-confidence is unstable and transient for athlete, but it may influence the athlete's behavior, so before improving the athlete's self-

confidence, at first should find out about the intension of its movement self-confidence and mechanism of operation, the coach or the sport psychologist can offer the tactics to these directions after understanding.

Other factors such as training from an early age, overtraining and cognitive appraisal may also contribute to burnout in sport.

Some scholars (Liao, 2003; Shane, 2000; Vealey, 1988) indicated that age, sex, sports type will affect athletes' confidence. Shia and Lu (2002) discussed the burnout of college tennis players by sex, training time and age. They found that age and training time will influence mood and staleness.

Definition of Terms

- 1 Negative self-concept of sport ability: Frustration that may occur from participating in sport activities.
- 2 Devaluation by coach and teammates: Negative feedback or evaluation from coach and teammates.
- 3 Psychological withdrawals: No response to problems due to stress.
- 4 Perception of personal sport performance: The expected sports achievements and satisfaction from coach.
- 5 Emotional and physical exhaustion: The emotion and exhaustion cause by sports participating.
- 6 Self-confidence: Referring to the athlete can reach the ability to succeed, the faith or degree that is sure of generally held to them in sports.

Methods

Description of Subjects

The subjects in this research consisted of two major groups from universities in Taiwan. The groups included top ten national (international) level collegiate athletes and national game athletes from Physical Education departments of universities. The players range from novice to intermediate and from advanced to elite athletes. Additionally, there were 82 males and 70 females (N=152) in this study (see Table 1).

Table 1 Sample distribution

Background	Classification	N	Percentage
sex	Male	82	53.9%
	Female	70	46.1%
Competition level	National level	33	21.7%
	National game	119	78.3%
Days of practice per week	Less than 3 days	15	9.9%
	4-5 days	101	66.4%
	6-7 days	36	23.7%

Research Instruments

The research instruments were Competitive Burnout Inventory and the Inventory of Self-Confidence. A pretest of these inventories was answered by coaches and athletes. By using the pretest, we can confirm the content's validity. When executing the inventory test, the authors explained test procedures to control for consistency.

The Competitive Burnout Inventory of this research was developed by Lu et al (2001). The main purpose of this inventory is to measure the degree of competitive burnout. There are 25 criteria to measure competitive burnout. The criteria include five factors: Negative self concept of sport ability, Devaluation by coach and teammates, Psychological withdrawal, Perception of personal sport performance and Emotional and physical exhaustion. Attitudes to each of the service attributes used in the inventory

were assessed using a seven-point Likert scale anchored by the level of "1 = never" to "7 = always". The total reliability of this inventory is 66.73%. The consistency of each factor is presented by Cronbach α , with values ranging from 0.68 to 0.92.

This scale is using the confidence scale in the development of athletic cognitive pattern scale which (1993) establishes by Liao, Z. M. (9 topics) carries on executes measured. Foundations of the people Mahoney that Liao, Z. M. is main (1988) Sport psychological for technical staff for five editions of questionnaires (Psychological Skills Inventory for Sport, whether R-5; PSIS-5) Revise but become "The scale of confidence meter of 36 question editions of the development of athletic cognitive pattern scale. This quantity scale adopts the model of seven-point scale anchored by the level of "1 = disagree extremely" to "7 = highly agree". In the confidence level test aspect of, by Cronbach is using to test an internal uniformity of this scale, the confidence level is 0.78. In the validity level test aspect, this scale distinguishes validity level analysis discrimination outstanding group 35 by the area with common group 28, and the result two groups of differences reach the remarkable standard, indicated has the good validity. (Liao Zhumin, 1993).

Results and Discussion

The purposes of this study were: 1. to compare the differences of competitive burnout and confidence of college table tennis athletes with different demographic variables, and 2. to explore the relationship of college table tennis athletes' competitive burnout and confidence.

1. The difference between male and female athletes' competitive burnout and confidence

Table 2 shows the difference between male and female athletes' burnout and confidence. "Devaluation by coach and teammates" and "Perception of personal sport performance" showed males scored significantly higher than females. This result agrees with Gill (2000) and Shia and Lu (2002). Males believe their ability is better than females, but the evaluation estimated by coaches and teammates is negative.

Table 2 The difference between male and female athletes for competitive burnout and confidence

Variable	Sex	N	Mean	SD	t-value	p-value
Emotional and physical exhaustion	Male	82	26.63	7.00	-0.66	.512
	Female	70	27.37	6.78		
Perception of personal sport performance	Male	82	36.68	8.74	2.28*	.024
	Female	70	33.86	6.52		
Psychological withdrawal	Male	82	14.17	3.41	0.95	.342
	Female	70	13.67	2.98		
Devaluation by coach and teammates	Male	82	13.87	5.39	3.36*	.001
	Female	70	10.90	5.47		
Negative self concept of sport ability	Male	82	39.82	3.58	-0.99	.323
	Female	70	39.03	3.33		
Confidence	Male	82	28.17	6.37	0.79	.431
	Female	70	28.83	5.85		

*p < .05

2. The analysis of competitive burnout and confidence for different competitive levels

Table 3 shows that "Psychological withdrawal," "is significantly different between the levels of competition. The national level athletes' scored higher than the other competition level. The result shows the national-level athlete in the face of more taking the responsibility of arranging, relatively shrink back psychologically.

Table 3 The competitive burnout and confidence of comparison by athletes' level

Variable	level	N	Mean	SD	t-value	p-value
Emotional and physical exhaustion	National level	20	27.65	9.06	0.78	.435
	National game	94	26.36	6.08		
Perception of personal sport performance	National level	20	38.00	10.62	1.81	.072
	National game	94	34.61	6.81		
Psychological withdrawal	National level	20	15.70	3.15	2.73*	.007
	National game	94	13.55	3.20		
Devaluation by coach and teammates	National level	20	13.05	6.56	0.67	.503
Confidence	National level	20	38.50	11.38	1.78	.078
	National game	94	34.66	8.14		

*p < .05

Considering training time, Table 4 demonstrates that "Devaluation by coach and teammates" is a significant variable related to competitive burnout and confidence. Because athletes often train together with coaches and teammates at practice, the negative evaluation of athletes may occur more easily and frequently. The results also shows that the emotion expressiveness of athletes who training 6-7 days per week are better than 4-5days per week. From the research, athletes spend more time on the practices; they will have more confidence to win the game. As a result, the practices help athletes to build their confidence. Comparing to the athletes who spend less time on practices, athletes' confidence is different than sportsman who spend more time on their practices. For the teamwork, it has some problems to communicate with couches and team-members. From the research, athletes spend more time on the practices; they will have more confidence to win the game. As a result, the practices help athletes to build their confidence. Comparing to the athletes who spend less time on practices, athletes' confidence is different than sportsman who spend more time on their practices. For the teamwork, it has some problems to communicate with couches and team-members.

Table 4 The competitive burnout and confidence comparison by training time

Variable	Days	N	Mean	SD	F-value	p-value	post hoc
Emotional and physical exhaustion	Less than 3 days	15	25.27	5.30	5.47*	.005	6-7 > 4-5
	4-5 days	101	26.09	6.55			
	6-7 days	36	30.17	7.52			
Perception of personal sport performance	Less than 3 days	15	36.80	9.45	0.40	.673	
	4-5 days	101	35.02	7.74			
	6-7 days	36	35.81	7.81			
Psychological withdrawal	Less than 3 days	15	15.07	4.06	1.31	.272	
	4-5 days	101	13.69	3.15			
	6-7 days	36	14.17	3.00			
Devaluation by coach and teammates	Less than 3 days	15	10.53	4.75	7.38*	.001	6-7 > 4-5 > 3
	4-5 days	101	11.74	5.39			
	6-7 days	36	15.44	5.61			
Negative self concept of sport ability	Less than 3 days	15	10.33	2.58	0.81	.445	
	4-5 days	101	10.23	3.38			
	6-7 days	36	11.08	4.01			
Confidence	Less than 3 days	15	38.27	4.77	3.47*	.034	6-7 > 4-5
	4-5 days	101	38.81	6.20			
	6-7 days	36	41.75	5.98			

*p < .05

3. The correlation between table tennis athletes' competitive burnout and confidence

Table 5, shows the relation between "Confidence" and "Emotional and physical exhaustion" with "the movement ability negative self-concept" have the inverse correlation existence, "Individual movement performance consciousness presents" is being connected. Show the higher athlete's confidence of table tennis is, can relatively feel satisfied with one's own sport achievement, have spirit relatively, can raise the self-image and is it succeed in to feel in sport; and will not feel tired, depressed and mood is abominable, do not deny one's own concept to emerge even more.

Table 5 The correlation matrix between competitive burnout and confidence

variable	Emotional and physical exhaustion	Perception of personal sport performance	Psychological withdrawal	Devaluation by coach and teammates	Negative self concept of sport ability
Confidence	-0.24*	0.38*	-0.12	-0.08*	-0.44*

*p < .05

Conclusions and Suggestions

Conclusions

The purposes of this study were: 1. to compare the differences of competitive burnout and confidence of college table tennis athletes with different demographic variables, and 2. to explore the relationship of college table tennis athletes' competitive burnout and confidence. The findings were as follows:

1. Male athletes had higher scores of "devaluation by coach and teammates", and "Perception of personal sport performance" than those of female athletes.
2. National level athletes had higher scores of "psychological withdrawal" than those of national-game level athletes.

3. The athletes who practiced 6-7 days a week had higher scores of "devaluation by coach and teammates" than those of the athletes who practiced 4-5 days a week. Also the athletes who practiced 6-7 days a week had higher scores of "devaluation by coach and teammates" than those of the athletes who practiced less than 3 days a week.
4. There were positive correlations between "confidence" and "the perception of personal sport performance" of competitive burnout, while there were negative correlations between "self-confidence" with "emotional and physical exhaustion" and "negative self concept of sport ability".

Suggestions

1. The coaches should counsel athletes based on their background for reducing their sports burnout.

The results of this research suggest that the degree of athletic burnout occurring by male athletes is higher than female athletes. This may be due in part to the intensity of competitiveness. The more competition the more pressure the athlete feels. Therefore, the competitive burnout for sportsmen will occur. Coaches should offer male athletes counseling for avoiding pressure when training. Secondly, the athletes who have more time to train will respond with higher scores in the criteria Emotional and physical exhaustion and Devaluation by coach and teammates. Heavy training will make athletes feel exhausted and could attract coaches or teammates negative evaluations. Therefore, planned training will enhance the performance of athletes.

2. The coaches should counsel athletes on dealing with pressure.

To be successful, the athlete needs to know how to deal with pressure. The pressure is not only from themselves, but also from coaches, teammates or parents. In a violent competitive environment, athletes must be flexible to handle pressure. Letting go of issues will help the athlete avoid burnout.

3. Coach should assist the athlete to establish the self-confidence and the guidance in accordance to the competition pressure strategy

This research most important discovery nothing better than discovery self-confidence and the competition pressure may effective forecast athlete's athletics be tired in accordance to the strategy, this findings will be worth in the future all levels of training attention, i.e. no matter what kind of level's contestants need to teach the effective psychological skill each skill, by the effective skill, may depressurize produces to the movement tired influence, not only will have positive being of help to the result promotion, simultaneously can also lengthen athlete's movement life.

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