



# The Impact of Pre-Competition Anger on Self-Confidence and Success of Volleyball Players in Premier League and its Relation with Athletes' Experience

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**ABSTRACT:** This study is intended to examine the impact of pre-competition anger on self-confidence and success of volleyball players in Premier League and its relation with experience of athletes. Statistical population in this investigation includes all (15) present teams in Iranian Volleyball Premier League (2009-10) among of which some volleyball players (n=118) were elected randomly in hand as statistical sample for this study. In order to evaluate rate of anger among sample group, Spielberger State-Trait Anger Expression Inventory (STAXI) was adopted in which the subscales of Emotional States of anger (chronic anxiety), State Anger (anxiety), and Trait Anger (Expression of Anger) are evaluated in 4-value LIKERT Scale and Villay Sport Self-Confidence Questionnaire (1986) was utilized to assess athletes' self-confidence. With respect to team's status in table of competitions, rate of volleyball players' success was evaluated at the end of the given league season. To analyze data after adoption of Kolmogorov-Smirnov Test and making sure from data normal distribution ( $p > 0.05$ ), Multiple Analysis of Variance (MANOVA Test, Tukey Post Hoc Test, and Pearson's Correlation Test were used for data analysis at significance level ( $p \leq 0.05$ ). The result of study indicated that there is significant difference in acute anxiety subscale between top-lower rank teams with middle-lower rank teams ( $p \leq 0.05$ ;  $F=3.48$ ). Similarly, a significant difference was observed among all three team ranks in subscales of chronic anxiety ( $p \leq 0.05$ ;  $F=2.62$ ) and expression of anger/Trait Anger ( $p \leq 0.05$ ;  $F=4.06$ ). But no significant difference was seen in subscale of self-confidence between top-middle ranks with middle-lower ranks in these teams ( $p \leq 0.05$ ;  $F=2.51$ ).

**Keywords:** Anger, Self-Confidence, Success, Volleyball Player

ORIGINAL ARTICLE

## INTRODUCTION

It is required for sport coaches and psychologists to adopt sport applied psychology in order to make athletes familiar with destructive or facilitating factors of performance under conditions of exposure to anger and stressful situations. The results of several studies suggest that athletes experience anger before competition and during critical events more than other emotional states (Maxwell, 2005). Those athletes, who suffer from extreme stress and anger before competition, should be aware of stimulation of exposure strategies to destructive effects of emotions in exercise sessions. The results of different investigation indicate that application of various psychological skills for creation of appropriate mental readiness is strictly related to rate of achievement and performance in athletes (Susan, 2001). Evaluation and measurement of factors such as pre-competition anxiety, anger, concentration, and rate of using sport-imagery skill may noticeably affect on self-confidence and at last success of athletes (Robazza et al., 2003).

Thus the effective factors on team performance and success may be summarized in three variables of athletes' characteristics, coaches' traits and team factors. One can classify characteristics of athletes into

some factors like age, background, motive, anxiety, and self-confidence of players; coach's trait like Coaching rank, age, background, leadership style and behavior of coach; and eventually team factors including previous successes of team or group and team's solidarity and self-confidence (Robazza, et al., 2004). Results of different studies have shown that the paramount effective factors on athletes' performance are some variables such as athletes' skill level, experience, participation in critical games (Maxwell, 2004), competition anxiety, mental skills and sport type (Hanton et al., 2002), rate of effort and applied strategies (Maxwell, et al., 2005). But Bray et al. (2003) consider host and guest states as the foremost factor for occurrence of anxiety in athletes (Claudio et al., 2007). Thus, in the present study, the impact of pre-competition anger on self-confidence and success in volleyball players at Premier League and its relationship with athletes' experience has been explored.

During several studies, Maxwell (2004) reported that athletes in contact sports like rugby, American football, hockey and boxing in comparison with other athletes are at higher level in anger. Similarly, athletes may show more anger at time of failure in achieving the goals considered by their coach as well as

excessive excitation (Jones, 2003). The results came from Jones' study (2003) indicated that anger might be followed by positive or negative outcomes in performance of athletes. He expressed that excessive anger may cause interruption in concentration power, assessment of information and received feedback via rising stress transferred by coach and at the same time it interrupts performance, which resulted in occurrence of inappropriate reaction by athletes. Generally, through decreasing the stored energy, anger may reduce the possibility of access to success (Hosseini, et al., 2010).

In another study, Maxwell (2006) investigated into impact of anger on performance of drivers, who participated in Rally Games. Results of this study suggested that experienced drivers may exercise pre-competition anger at lower level and they have lower stress with higher self-confidence in comparison with amateur drivers (Lazarus, 2000). Connaughton (2002) argues that one of the paramount effective factors on success in athletes is self-confidence. Results of his study show that athletes with higher self-confidence may balance and control negative impacts due to anger and negative stress under critical conditions (Covassin, & Pero, 2004). Skinner et al. (2004) also deem self-control ability and environmental factors as the most practical existing strategies for reduction of destructive factors on performance in critical events (Ronayne, 2004). At the same time studies done by Mellalieu, and Neil (2006) indicated that self-confidence of athletes that is due to different skill level in athletes may be the most important effective variable on performance of athletes (Maxwell, et al., 2005). Findings of studies done by Robazza et al. (2004) signified that the experienced and skillful athletes enjoy the higher capability to control anxiety and pre-competition anger. Due to participation in different contests and acquisition of mental skills and way of tackling with anxiety- and anger-creating conditions, these athletes exploit from various strategies to control stressful situations (Mellalieu, et al., 2004).

But studies of Lazarus (2000) demonstrated this point that pre-competition anxiety prepares the primary condition for anger. Under stressful condition at average level, excessive stress and anger in athlete will reduce his/ her performance. Experienced athletes are able to campaign against their own negative emotions and they can control the created anger by proper interpretation and assessment of negative emotions like stress, excessive motivation and anxiety, and anger (Lazarus, 2000).

## METHODOLOGY

In this study, statistical population comprises of all (Mellalieu, et al., 2004) present teams in Volleyball Competition League (2009-10) out of which (n=119) volleyball players from 9 team (including *Piroozi, SAIPA, Amol Kaleh, Gilan Damash, Gonbad Javaheri, Kerman Bargh, Sirjan Golgozar, Khorasan Volleyball Panel and Islamic Azad University*) were selected randomly as statistical sample in hand for this study. Questionnaires were distributed among all participants in statistical population, but some questionnaires (n=99) were cancelled and the rest were used. For data analysis after application of Kolmogorov- Smirnov and making sure of normal distribution of data ( $p>0.05$ ), Multiple Analysis of Variance (MANOVA) test and Tukey Post Hoc test as well as Pearson Correlation test were utilized ( $p\leq 0.05$ ).

In order to evaluate rate of anger in sample groups, some questionnaires were adopted including Spielberger Trait-Anger Expression Inventory (STAXI) (1991) with 44 questions that evaluate anger level in athletes within three subscales of emotional states of anger/ *State Anger* (chronic anxiety), personal behavior inclined to anger/ *Trait Anger* (acute anxiety) and *Expression of Anger* through 4- value LIKERT Scale (1: Never; 2: Sometimes; 3: Mainly; and 4: Always). Ruiz (2004) reported the value of internal consistency for this questionnaire by means of Cronbach's Alpha Coefficient as ( $r= 0.64-0.84$ ) (Robazza et al., 2003). Villay Sport- Confidence Questionnaire (1986), which also measures rate of athletes' perception from their own ability in acquiring the victory and success, was adopted for evaluation of self-confidence in athletes (Ronayne, 2004). Hosseini (2009) reported the internal consistency value of this questionnaire through a leading study and by means of Cronbach's alpha coefficient as ( $r=0.81$ ) (Bois, 2009). With respect to position of team in table of competitions, rate of success in volleyball players was evaluated at the end of league games.

In this study, all volleyball teams present in Premier League were divided into three groups including successful team (5 teams at top of games list), teams with average success (5 teams in the middle of games list), and failed teams (5 teams at the end of games list). Then, by means of random sampling technique, 9 teams from top, middle and lower parts of competitions table were selected as statistical sample in this survey. After arrangement of the needed coordination with coaches of these teams, questionnaires were distributed among sample participants by researcher and by cooperation with coaches of teams before starting competition. Furthermore, to prevent from any bias, athletes were asked to avoid consulting with others when they filled out questionnaires.

**RESULTS**

Analysis on statistical data indicated that players from successful teams had the better conditions than failed and less successful athletes in all subscales of anger and self- confidence variables. The highest score was acquired by successful teams in subscale of acute anxiety (28.31) while the lowest score was related to subscale of chronic anxiety (21.29). Similarly, athletes in lower rank (29.69) of table were more inclined for occurrence of anger in contrast to athletes in middle-rank (26.71) and top teams (21.78) in this table (Table-1). At the same time, results of MANOVA test along with iterative measurement and Tukey Post Hoc test signified that there is significant difference in subscale acute anxiety among top- lower rank teams with middle- lower rank teams ( $p \leq 0.05$ ;  $F=3.48$ ). Similarly,

a significant difference was observed between all three ranks of teams in subscales of chronic anxiety and expression of anger ( $p \leq 0.05$ ;  $F=2.62$ ). But in subscale of self- confidence, this difference was significant only among top- lower rank teams while no significant difference was seen in top- middle rank teams with middle- lower rank teams (Table-2).

At the same time, the relationship among rate of anger and self- confidence with experience of volleyball players was examined in this study. The results of studies showed that there is no significant relationship among athletes' experience and anger. However, in comparison with less- experiences athletes, experienced athletes have self- confidence at higher level (Table-3).

**Table 1.** Mean values of subscales anger and self- confidence in volleyball players

Subscales	Top- Rank Teams		Middle- Rank Teams		Low- Rank Teams	
	M	SD	M	SD	M	SD
1: State Anxiety (Acute)	28.31	2.45	29.86	3.41	32.13	<b>2.49</b>
2: Personality Anxiety (Chronic)	21.29	3.81	26.54	2.08	29.67	<b>2.54</b>
3: Expression of Anger – Self Confidence	21.78	1.68	26.71	1.75	29.69	<b>2.91</b>
	24.09	0.86	25.36	1.29	27.61	<b>1.13</b>

1:State Anger (Emotional state) 2:Trait Anger, 3:Expression of Anger\*( $p \leq 0.05$ )

**Table 2.** Comparison among subscales of anger in successful, less- successful and failed teams

Group		Mean Difference	F	Sig
Acute Anxiety	Top-Middle Rank Teams	1.55	3.48	0.19
	Top-Lower Rank Teams	3.82		*0.029
	Middle-Lower Rank Teams	2.27		*0.06
Chronic Anxiety	Top-Middle Rank Teams	5.25	2.62	*0.02
	Top-Lower Rank Teams	7.91		*0.008
	Middle-Lower Rank Teams	3.13		*0.04
Expression of Anger	Top-Middle Rank Teams	3.27	4.06	* 0.05
	Top-Lower Rank Teams	7.91		*0.001
	Middle-Lower Rank Teams	2.98		*0.011
Self Confidence	Top-Middle Rank Teams	1.27	2.51	0.33
	Top-Lower Rank Teams	3.52		*0.005
	Middle-Lower Rank Teams	2.25		0.16

\*( $p \leq 0.05$ )

**Table 3.** Relation among anger and self- confidence with experience in volleyball players

Variable	Anger	Self Confidence
	R	
Volleyball Players' Experience	0.008	0.19

**DISCUSSION**

During recent years, techniques of application of mental skills have been noticeably used by sport coaches and psychologists in order to improve

athletes' performance and control and balance of negative environmental and internal factors that cause reducing athletes' performance, especially in critical events. Research findings showed that anger and self-

confidence remarkably affect on rate of success in volleyball players. Players from five teams at top of the table in Iranian Premier League Competitions had the lower mean scores in subscales of chronic anger, acute anger and expression of anger in comparison with other teams. Results of this study reflected that rather than being aware of techniques for control of negative impact factors on performance, athletes in successful teams have better ability to control destructive factors before competition. Probably due to presence greater number of current and former players of national team in the five premier volleyball teams and having several experiences among these players through participation in critical sport events may be the possible reasons for self confidence among these athletes. Findings from studies done by Susan (2001), Boise (2009) and Hantun et al. (2002) confirmed this point that volleyball players with higher level of self-confidence under critical conditions might control stress and overcome stressful situations; thus, they would be more successful in achieving goals considered by coach and display of favorable performance (Bray et al. 2003; Hanton, et al., 2004; Skinner et al., 2004). Despite of this fact that results of this study verified negative impact of anger on success and self-confidence among volleyball players, but results of research that conducted by Claudio (2007) indicated that pre-competition anxiety and anger might affect positively on performance in contact sports (rugby, hockey) (Connaughton et al., 2002). Also, Hanton (2004) reported in his studies that pre-competition anxiety and anger might both constructive and or destructive effects. He argues that if athletes have ability to control the conditions which create anger and anxiety, they could use this created surplus energy for delaying tiredness and making further effort to achieve the goals considered by the coach and improvement alertness level and properly concentration. Within his studies, Pears (2007) declared that professional and experienced footballers who have experienced for playing in leading leagues might have high self-confidence and better performance compared to other football players (Maxwell, 2004). Kovassin (2004) also reported a direct relationship among athletes' self-confidence with team success in tennis players (Fletcher et al., 2001). But in addition to approving the positive impact of anger in performance of professional karatekas, Ruize (2004) reported that anxiety and rate of anger are related to athletes' personality traits. If athletes find source of anger inside themselves, they could control the stress and frustration caused by anger by taking appropriate strategies like positive self- talk, deeply breath and imagery of excellent performance. But when source of anger is from outside (spectator

and sensitivity of competition), athlete should use his/ her experience unless the possibility for achieving success may be reduced. Therefore, in order to improve performance in athletes, sport coaches and experts shall employ practically sport psychological findings and as bases in exercise session with athletes so that to prepare ground for improvement of athletes' performance through increase in mental skills upon day of competition. Alternatively, one of the effective factors on team performance and success is characteristics of coaches including coaching degree (level), age, background, leadership style and behavior of coach as well as team internal conditions such as former successes of team or group, solidarity and self-confidence of team. Coaching executives in teams at the top of competitions list in Premier League of Iran include some coaches who are currently responsible for leading national team and or have been tasked for coaching national team within different age groups in the former tournaments. Attending in international and overseas competitions may prepare the ground for acquiring experience from critical games and different environmental conditions for these coaches and players so this may have positive impact directly and indirectly on their achievement. Mellalieu, S.D., Neil (2006) also have emphasized on role of coach and establishing proper relation with athletes and believed that level of athletes' self-confidence which is due to different level of skills in athletes, is the foremost effective variable on performance of athletes. Therefore, strategies of improvement of self-confidence should be conveyed to athlete by coaches in exercise sessions and within critical events (Maxwell, et al., 2005). At the same time results of Jones' studies (2003) showed that excessive anger caused by rising stress may interfere in concentration power, information assessment and received feedback from coach, and interruption in performance, which causes improper reaction from athletes. Through reduction of the stored energy, interruption in performance may reduce the possibility for achieving success. In an investigation on reasons for athletes' failure and defeat and causes for weakly performance in critical competitions, Shinke, R & Costa (2001) expressed that lack of experience in participation in critical competitions and also lack of concentration and sufficient self-confidence are considered as the paramount effective factors in reducing performance and occurrence of abnormal states in athletes. The factors such as increasing experience of athletes in various tournaments, training of persistence in activity at high level and or vice versa reducing activity and economies of energy under different circumstances may improve

effectiveness and performance in athletes (Robazza, et al., 2004).

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