Original Article

Ballgames and burnout

DILSAD AHMED¹, WALTER KING YAN HO², KI-CHEON LEE³

^{1,2}Faculty of Education, University of Macau, CHINA

³Department of Sports & Leisure Studies, Korea University, SOUTH KOREA

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Abstract:

Objective: Burnout is a highly intricate psychological parameter (Cresswell & Erklund, 2006a) and it is difficult to gauge within sports setting (Ewing and Seefeldt, 2002) though very limited amount of researches undertaken (Cresswell & Erklund, 2006b, Fraser-Thomas, Côté & Deakin, 2005). In this recent decade, burnout has placed as an important topic in the field of sports psychology and discussed in length about its exploration among the upcoming youth athletes (Brandonn S. Harris, 2005; Cresswell & Erklund, 2006a). Hence the researchers of this study were interested to conduct this present study due to the social circumstances in India and the very limited understanding of burnout among the Indian youth athletes. **Methods:** To carry out the overarching aim of this study, the investigation emphasis on the comparison of burnout level among the youth ball game players. A sample of total 215 Male athletes participated in this study. All subjects were represented from three sports groups such as football, basketball and volleyball. Out of 215 athletes (n=70) were footballers, (n=65) were basketball and (n=80) were volleyball players. The age of the participants ranged between 14 to 18 years. All subjects participated in the school state level competitions under Indian Certificate of Secondary Education Board (ICSE). **An instrument used as a tool:** Athlete Burnout Questionnaire (ABQ) developed by Raedeke (1997) and Raedeke & Smith (2001), was administered to measure the levels of burnout of the ballgame players. **Results:** For statistical analysis and interpretation of the data; descriptive statistics such as mean, SD, SE were applied. To see the correlation for all the three sub-factors of the burnout, bivariate correlation (Person Correlation) among all the ball game players was carried out. Further, to see the comparative level of burnout among the three ballgame groups in the sub-factors of reduced sense of accomplishment, emotional and physical exhaustion and devaluation separately; One-way analysis of variance (*F-test*) was used. The mean difference was tested at .05 level of significance. To find out the pairwise and Critical difference of mean comparison, Least Significant Difference (LSD) technique for equal sample was applied. **Conclusions:** The sub-factors on emotion, physical exhaustion and devaluation of burnout showed significant differences among the volleyball, basketball and football players.

Keywords: ballgames, burnout, devaluation

Introduction

Games and Sports are the medium whereby children get ample opportunities to develop their potentiality (Côté & Fraser-Thomas, 2007). There are varieties of reasons for children to participate in sports (Gould & Petlichkoff, 1988). The reasons such as enhancing well balanced physiological, psychological and sociological status as well as developing athletic talent are some of the contributing factors (Gould & Carson, 2004). As burnout is a highly prevalent factor for adolescent athletes, it arrests with attention and becomes an important part of discussion among researchers from the field of sports psychology. In India, sports is still an unsystematic discipline and rarely any research work has conducted before in this area. It has been seen that players are tremendously affected by various means such as lack of facility, cooperation from federation, coaching facility, parental support, etc. which ultimately could become potential antecedents for burnout to develop. This study then focused on the investigation of these factors and its effects in the development of burnout and in young athlete. To adopt the theoretical framework for present study, Self-determination Theory (Deci & Ryan, 1985) has been found as appropriate tool to corroborate the scrutiny of causes behind athlete's burnout (Hodge, Lonsdale, & Ng, 2008). It is also well evident that the fulfillment of basic need may turn as hidden factors toward the progress development in athletes' activity. For the basic needs theory, a sub-theory of self-determination theory as proposed by Deci and Ryan (2000) on humans' basic psychological needs for competence, autonomy, and relatedness may found useful. Within the sport context, competence refers to a perception that one is able to be effective in one's sport. Autonomy involves feelings of volition, choice, and self-directedness, while relatedness refers to perceptions of connectedness with others. When these needs are satisfied, humans are expected to experience optimal wellbeing (e.g. subjective vitality; Ryan & Frederick,

1997). Conversely, the thwarting of needs is thought to lead to expressions of ill-being (e.g. burnout; Perreault, Gaudreau, Lapointe & Lacroix, 2007). According to Deci and Ryan (1985), the extent to which these needs are satisfied determines the degree to which an athlete's behavior is regulated by processes that are congruent with the individual's sense of self, known as self-determined motivation.

Participation in games and sports showed a positive concordance in career achievement (*Larson & Verma, 1999*) for youth and could alleviate the number of school dropout and their delinquent activities (*McMillan & Reed, 1994; Segrave, 1983*). Nevertheless, the level of burnout in sports produced adverse with critical and specific findings for conclusion. Several terms are often interchangeably used in burnout literature and at the same time it is important to distinguish how these terms differ from burnout with its positive and negative occurrence (*Raglin & Wilson, 2000a*) in sports setting.

Some of the terms documented have the relationship with "overtraining" (*Raglin, 1993*) and the maladaptive responses to overtraining link to the development of staleness (*Weinberg & Gould, 1999*), hypercortisolism, premature fatigue during training (*Raglin & Wilson, 2000a*), mood disturbances (*Raglin, 1993; Raglin & Wilson, 2000b*), maladaptive fatigue syndrome (*Henschen, 2000*), multidimensional syndrome (*Dale & Weinberg, 1990; Gould, 1996*) and chronic stress (*Dale & Weinberg, 1990*). Coakley (1992) suggested that burnout lies in more of a social foundation rather than stress (*Brandonn S, 2005*). Schmidt and Stein (1991), by using a commitment perspective for analysis, suggested that burnout occurred when athletes remain in sport for some other reason outside of enjoyment (*Brandonn S, 2005*). But the most popular definition on burnout was extended by Maslach and Jackson (1981). Their findings revealed that burnout could be identified as a syndrome characterized by emotional exhaustion, depersonalization and a lessened sense of personal accomplishment (*Brandonn S, 2005*).

The latest findings when based on the contemporary psychological theory in sports setting, caters a valid instrument to measure the antecedents and intricate syndrome in burnout (*Cresswell & Eklund, 2006a, Gould, 1996; Raedeke, 1997; Coakley, 1992; Smith, 1986*). Burnout was then turned to be a maladaptive behavior (*Smith, 1986*) and affected negatively on sports performance with causes on psychological imbalances and consequently dropout from sports (*Cresswell & Eklund, 2007*). Sport can be used as a vehicle to develop life skills, a sense of self-esteem and quality relationships with others, but research showed that it can also lead to disaffection, poor moral decision-making and make people feel miserable about them when athletes feel diffident on his skill perfectionism where it is the cause of burnout to occur.

However, the recent construction of burnout scale by Raedeke and Smith (2001) has tremendously helped to get a better understanding of the conceptualization of burnout and have gained a worldwide popularity with new findings to resolve the definitional problem. According to Raedeke & Smith, (2001) and Maslach and Jackson, (1981) their findings suggested that there were three core symptoms of athlete burnout namely as; reduced sense of accomplishment, emotional and physical exhaustion, and devalued participation in a particular sport. Burnout is also been characterized as a chronic condition that develops when one is working too hard for too long in a high-pressure situation (*Feigley, 1984; Amy, Edmund & Edward, 2000*). The problem gets serious when one meets with insufficient support to meet the achievement demands (*Smith, 1986*).

In a study conducted over 8000 samples, it found that children participated in game and sports with main reason to see themselves in good shape, have more fun, more chance to improve their skill level and more opportunities to understand group dynamics (*Seefeldt, Ewing & Walk, 1992*). To maintain this consistency, it requires a favourable environment wherein they are being provided regular time-to-time counseling and enough opportunities. Young footballers show signs of burnout and risk of burnout before they leave school because of the expected change of standards of coaches, perfectionism in his skill, getting various demands to fulfill from the side of parents and team members.

These are the stress for some young professional footballers and also seen of signs such as chronic stress, exhaustion, and disillusion with their sport at a young age (*Andrew Hill*). With the regard of elite sports context the level of will to win and achievement is seems higher (*Smith, 1986*) and ever increasing demand may sometime tends to convert a mechanism which evolves the development of burnout and as such the performance to consistently falling short of acceptable standard (*Cresswell & Eklund, 2006*). In a challenging situation individual may perceive achievement striving as a threat to self-worth and this situation often causes a kind of dissatisfaction and as result contribute with psychologically aversive effects to practice and competition (*Smith, 1986*).

Therefore the main purpose of the study was to explore through comparative study among the three sports group viz. football, basketball and volleyball on burnout. It hypothesized that there would be a significant difference among the ball game payers on all the three sub-factors such as, reduced sense of accomplishment, emotional/physical exhaustion and devaluation of burnout. Additionally, the present study helps to assess the level of burnout among the ballgame game players (football, basketball and volleyball) (*Brodkin and Weiss, 1990*) and assists sport consultants with better preparation and implementation on counselling works especially on youth sports athletes. Further to this, the research also gives researchers a picture to compare the present result with other studies being conducted on the same line under different social setting (*Brodkin and Weiss, 1990*).

Method

Participants: A total of 215 male young athletes in India participated in this study. The subjects came from three sports groups of volleyball, basketball and football. Out of the 215 athletes, (n=70) were footballers, (n=65) were basketball and (n=80) were volleyball players. The age of participants ranged between 14 to 18 years. All subjects participated in the school state level competitions under Indian Certificate of Secondary Education Board (ICSE) at the time of study.

An instrument used: Athlete Burnout Questionnaire (ABQ) developed by *Raedeke (1997) and Raedeke & Smith (2001)* was administered to measure the levels of burnout of the ballgame players. Coefficient alpha for the inventory subscales obtained in this study are above the acceptable levels (.78 in .92). The ABQ consisted of three subscales: Reduced Sense of Accomplishment (RA), Emotional/Physical Exhaustion (E), and Devaluation (D). Subjects were instructed to give immediate response based on the degree "to which the subjects experienced on the item right now". Each subscale has a cumulative score derived by adding the five items, and can range from 5 to 25. Scores were based on a 1 (*almost never*) to 5 (*almost always*) Likert-type scale, with higher scores indicative the feelings with the association of highest perceived burnout. Internal consistency had been reported previously by the ABQ authors as >.70 for the subscales, with test-retest reliability ranging from .86 to .92 on the three scales (*Raedeke & Smith, 2001*). In this study, internal reliability measures were calculated using Cronbach alpha coefficients for internal consistency. All three ABQ subscales were at acceptable cronbach alpha levels (RA = .78, E = .91, D = .87).

Results

For statistical analysis and interpretation, descriptive statistics such as mean and standard deviation were used. To see the relationship of all the sub-factors among the three groups, bivariate correlation (*Pearson Correlation*) was used. Further to compare the mean level of the burnout among the ballgame players of the three groups viz. football, basketball and volleyball; One-way analysis of variance (F-test) was used. The mean difference was tested for significance at the .05 level of confidence. To find out the pairwise and Critical difference of mean comparison, Least Significant Difference technique for equal sample was applied.

Table 1. Combined Descriptive statistics of all sub-factors of burnout among the three sports groups (football, basketball and volleyball).

	N	Mean	SD
Football Reduce Sense of Accomplishment (<i>FRA1</i>)	70	17.8429	4.01315
Basketball Reduce Sense of Accomplishment (<i>BRA1</i>)	65	19.0000	3.10745
Volleyball Reduce Sense of Accomplishment (<i>VRA1</i>)	80	18.6125	3.51666
Football Emotional and Physical Exhaustion (<i>FE2</i>)	70	17.3000	3.61699
Basketball Emotional/Physical Exhaustion (<i>BE2</i>)	65	18.8000	3.67509
Volleyball Emotional/Physical Exhaustion (<i>VE2</i>)	80	19.5125	3.47502
Football Devaluation (<i>FD3</i>)	70	16.7714	4.08664
Basketball Devaluation (<i>BD3</i>)	65	18.3231	3.19231
Volleyball Devaluation (<i>VD3</i>)	80	18.2500	3.62306

Table 2. Combined bivariate correlations of all the sub-factors of burnout among the three sports groups

Subfactors of burnout combined	(<i>VRA1</i>)	(<i>VE2</i>)	(<i>VD3</i>)	(<i>BRA1</i>)	(<i>BE2</i>)	(<i>BD3</i>)	(<i>FRA1</i>)	(<i>FE2</i>)	(<i>FD3</i>)
Volleyball Reduce Sense of Accomplishment (<i>VRA1</i>)	1	-.264*	.119	.007	-.273*	.204	.403**	.138	-.084
Volleyball Emotional/Physical Exhaustion (<i>VE2</i>)		1	.040	.131	.467**	-.077	-.230	.016	.125
Volleyball Devaluation (<i>VD3</i>)			1	-.252*	-.208	-.107	.196	.206	-.123
Basketball Reduce Sense of Accomplishment (<i>BRA1</i>)				1	.137	-.105	-.035	-.136	-.125
Basketball Emotional/Physical Exhaustion (<i>BE2</i>)					1	-.258*	-.425**	.115	-.008
Basketball Devaluation (<i>BD3</i>)						1	-.073	-.189	.298**
Football Reduce Sense of Accomplishment (<i>FRA1</i>)							1	-.117	-.179
Football Emotional and Physical Exhaustion (<i>FE2</i>)								1	-.156
Football Devaluation (<i>FD3</i>)									1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3. ANOVA table on Reduce Sense of Accomplishment of burnout among the three groups

Factors	Sum of Squares	Df	Mean Square	F
Reduce Sense of Accomplishment				
Between Groups	47.397	2	23.698	
Within Groups	2706.259	212	12.765	1.856
Total	2753.656	214		
Emotional and Physical Exhaustion				
Between Groups	187.396	2	93.698	
Within Groups	2721.087	212	12.835	7.300
Total	2908.484	214		
Devaluation				
Between Groups	108.023	2	54.012	
Within Groups	2841.558	212	13.404	4.030
Total	2949.581	214		

Since the calculated F-value of the sub-factors namely Reduce Sense of Accomplishment (1.856), Emotional and Physical Exhaustion (7.300) and Devaluation of burnout (4.030) of burnout were greater than the tabulated value of (2, 212) = 3.04 at .05 level of significance and hence null hypothesis (Ho) was rejected, the data showed that there was significant difference among the three groups of ballgames athletes viz. volleyball, basketball and football.

Table 4. Paired mean difference of Reduce Sense of Accomplishment

Football	Basketball	Volleyball	Mean Difference	Critical difference
Reduce Sense of Accomplishment				
17.8429	19.0000		1.1571	1.52
17.8429		18.6125	0.7696	1.44
	19.0000	18.6125	0.3875	1.47
Emotional and Physical Exhaustion				
17.3000	18.8000		1.5	1.53
17.3000		19.5125	2.2125	1.45*
	18.8000	19.5125	0.7125	1.48
Devaluation				
16.7714	18.3231		1.5517	1.56
16.7714		18.2500	1.4786	1.48
	18.3231	18.2500	0.0731	1.51

*. The mean difference is significant at the 0.05 level.

When comparing the pairwise difference of means with the critical difference, it came with evidence that the groups “football and basketball”, “football and volleyball”, “basketball and football” did not show any significant mean difference on the sub-factors of “Reduce Sense of Accomplishment” and “Devaluation”. Again, the data indicated that the sub-factor of “Emotional and Physical Exhaustion” showed significant difference between football and volleyball (1.45*) but pairwise mean calculation did not show any significant differences on the groups of “football and basketball” (1.53) and “basketball and football” (1.48) as the calculated values were less than the Critical Difference values.

Discussions and Conclusions

The prevalence of burnout is seen as conceivable barrier for youth athletes because of the various stress and negative experiences (Smoll, 1986). This research provides guidelines in forging the development of basic theory for concordance of outcomes in understanding the psychological, social, and physical needs of young athletes. The primary purpose of the study was to compare the burnout level among the three sports group viz. volleyball, basketball and football. Statistical analysis showed a significant difference of the sub-factor on “Emotional and Physical Exhaustion” of burnout between the group of football (17.30) and volleyball (19.51) at critical difference of (1.45). Researching works on the study of Indian athletes’ burnout was very few in number and thus only limited antecedent evidences were presented for burnout study. Though the sample of this present study were school state level participants, the increased training load, lack of recovery time and high competition pressure were the facts that require attention (Raglin and Wilson, 2000). In India there is no proper selection process at school level though physical education was still not regarded as a compulsory subject or as a part of core subject. Research indicated that poor selection process or lack of scope to promote or a platform to demonstrate as showcase influenced athlete’s identity (Brewer, Selby, Linder & Petitpas, 1999; Smith, 1986) and the causes for burnout was corroborated with the “Effort-Reward-Imbalance Model”, as suggested by Siegrist, (1996). The model suggested that if there was lack of reciprocity between effort and reward, it may cause emotional strain and distress and lead to the influence of athletes’ self-esteem development.

It is also a situation in India where there is no scope for athletes and thus causes misconception to sports participation. People feel that it is not a good career profession or will carry equal respect as other profession does. Under such context of thought, it is easy to jump to the conclusion that materialistic mentality decreases the level of hope in athletes to go ahead with all efforts. In a study conducted by Gustafsson, Hassmén & Podlog (2010) on 178 competitive athletes (63 females and 115 males) aged 15-20 years. The study investigated the relationship between hope and burnout in competitive sport. The results of the study showed that low-hope athletes scored significantly higher than medium- and high-hope athletes showed the same effect on all three burnout dimensions such as emotional/physical exhaustion, reduced sense of accomplishment, and sport devaluation (Gustafsson et. al, 2010). Finally, results revealed that suitable thinking in athletes was a significant predictor of the different dimensions in burnout. Frustration over unmet goals and a perceived lack of suitable thinking are characteristic of low-hope athletes and may pose a risk factor in enhancing the development of burnout in athletes, whereas being able to maintain suitable hope appears to be the necessary ingredients for healthy and well balanced development in athletes (Gustafsson et. al, 2010).

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