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EVALUATION OF STRESS AND BURNOUT LEVELS AMONG INDIVIDUAL AND TEAM MALE ATHLETES

Abstract: Athlete burnout is a maladaptive psychological outcome sometimes associated with sport participation. Thus the purpose of this study was to investigation and evaluation of stress and burnout levels among individual and team athletes. Participants included 200 male athletes that divided in 2 groups (individual and team athletes) and their ages ranged from 23-34 years-old. Individual sport fields were consisted the badminton, table tennis, Judo and Karate. Furthermore, team sport fields were consisted the football, handball, basketball and volleyball teams. All participants filled in the Maslach Burnout Inventory (MBI) and the Perceived Stress Scale (PSS). Results showed that the differences between two groups were significant at the level of $P<0.05$ and team athletes obtained higher scores than individual athletes in stress variable. Results showed that differences between team athletes group with $F=5.234$ was significant at the level of $P<0.05$. The Bonferroni post hoc showed that all three component were significant in this group ($P<0.05$). Also, our results showed that differences between individual athletes group $F=5.234$ was significant at the level of $P<0.05$. The Bonferroni post hoc showed that only differences between personal accomplishment component was significant ($P<0.05$). Based on our results, team athletes obtained stress and burnout scores than individual athletes, thus coaches and other persons that involved in clubs, officials and sport associations should pay special attention to this problem.

Key Words: Burnout, Stress, Individual athletes, Team athletes

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Introduction

Athlete burnout is a maladaptive outcome that is hypothesized to negatively affect performance, underpin psychological and physical ill-being, and contribute to dropout from sport (1). Consequently, the occurrence of burnout has been viewed as an important issue in the sport psychology literature (2,3). Early studies investigating burnout used various conceptual definitions that served to create confusion regarding the nature of athlete burnout (4). More recently, researchers have given support to Raedeke's (1997) definition of athlete burnout as a syndrome characterized by: (1) emotional and physical exhaustion; (2) sport devaluation; and (3) a reduced sense of accomplishment (5,6). This symptom-based definition provides a means by which the potential causes and consequences of burnout, such as illness, injury, and dropout (7), can be examined.

The burnout is a depletion of emotional and physical resources beyond that associated with regular participation in sport. The second is a self perceived sense of reduced accomplishment in terms of goals and achievement in sport. The final symptom involves the devaluation of one's achievement and overall involvement in sport (8,9). Using Raedeke's definition and instrument (i.e., Athlete Burnout Questionnaire), researchers have to examine those personality characteristics that might predict athlete burnout. Burnout is a psychological phenomenon of prolonged exhaustion and disinterest, typically in the work context (10,11), and is an important aspect of employee well-being and organizational research. Organizational demands and resources have demonstrated an important role in the development of burnout (11,12). In addition, the organizational correlates of burnout such as turnover intentions, job satisfaction, and organizational commitment are important constructs for organizations (13).

The affective reaction and response to ongoing stress, known as burnout, can cause a deterioration or depletion of emotional and cognitive resources over time (14,15). Although researchers have studied job burnout for over three decades, there is still some confusion as to what exactly the construct entails. For instance, some have mistakenly considered burnout as stress or depression (16). While researchers have defined work stress as demands that tax or exceed the abilities of the person at work, burnout is actually individuals' patterns of response to work stressors (16). Burnout is also different from depression because of its specific work context, whereas depression symptoms persist across all facets of individuals' lives (17).

Burnout is an important issue in the psychological literature. One personality characteristic that has recently emerged as elevating the risk of athlete burnout is stress (8). Research has demonstrated that burnout can result in anxiety, depression, drops in self-esteem, substance abuse, decreased performance, and increased health problems (9-11). It is also seen as contagious and has a negative spillover effect on people's home lives (11,12). Based on these documents the aim of this research was

to investigate the evaluation of stress and burnout levels among Iranian male individual and team athletes.

Materials and Methods

Participants:

Participants included 200 athletes that divided in 2 groups (individual and team athletes). There were 100 individual and 100 team athletes, and their ages ranged from 23-34 years-old. Individual sport fields were consisted the badminton, table tennis, Judo and Karate. Furthermore, team sport fields were consisted the football, handball, basketball and volleyball teams. All participants filled in the Maslach Burnout Inventory (MBI) and the Perceived Stress Scale (PSS).

Instruments:

1. Maslach Burnout Inventory (MBI)

The Maslach Burnout Inventory (MBI) consisted of 22 items, using a seven-point Likert scale ranging from zero (never) to six (every day). The MBI has 3 subscales including emotional exhaustion (9 items), depersonalization (5 items), and personal accomplishment (8 items). Items were modified, with permission from CPP, Inc. (formerly Consulting Psychologists Press), in order to make the instrument more applicable to coaches; the words “job” and “work” were replaced by “coaching,” and the words “recipient” and “people” were replaced by “athletes”. Maslach et al. (1996) reported internal consistency coefficients of .90, .79, and .71 for each of the three subscales, respectively (18). In a sample of coaches, Vealey et al. (1992) reported internal consistency coefficients of 0.87, 0.73, and 0.75 for each scale, respectively (19). Maslach et al. (1996) demonstrated convergent validity between individual’s MBI scores and job characteristics associated with burnout (18).

2. Perceived Stress Scale (PSS)

The Perceived Stress Scale (PSS) was designed as a broad, subjective measure of stress appraisal. It consisted of 14 items that were assessed on a five-point Likert scale ranging from zero (never) to four (very much). For each of the 14 items, respondents were asked to indicate how often, in the past month, they had felt or thought a certain way (20,21). Cohen et al. (1983) reported internal consistency of .84 in a college freshman sample, .85 in a psychology student sample, and .86 in a smoking-

cessation sample (21). Cohen et al. (1983) provided evidence for predictive validity, finding that the PSS was a better predictor of health outcomes than the Life Events Scale and it significantly predicted visits to the health center in a sample of college freshman (21).

Data analysis

The collected data was analyzed by descriptive (mean and standard deviation) and inferential (independent t test and factorial analysis of variance 2 (groups) \times 3 (burnout levels)) statistical tests at the $P < 0.05$ significant level with SPSS Version 17.

Results

The descriptive statistic variables such as means (M) and standard deviations (SD) of burnout and stress among individual and team groups showed in table 1. Based on this information team athletes had higher stress and burnout levels rather than individual athletes (for more details see table 1).

Table 1. The descriptive results of burnout and stress scores among two groups

| Variables | Individual athletes | | Team athletes |
|-------------------------|---------------------|------|---------------|
| | (M) | (SD) | (M) |
| emotional exhaustion | 1.75 | 0.67 | 2.21 |
| Depersonalization | 1.67 | 0.78 | 2.56 |
| personal accomplishment | 5.45 | 0.89 | 6.14 |
| Perceived Stress | 2.78 | 0.52 | 3.01 |

Also, we used the independent t-test to determine the differences between individual and team athletes groups in stress scores. Results showed that the differences between two groups were significant at the level of $P < 0.05$ (see table 2 for more details). Furthermore, based on descriptive results that presented in table 1, the team athletes obtained higher scores than individual athletes in stress variable.

Table 2. Independent t test results between team and individual athletes groups

| Groups | N | T | Degree of freedom | Significant level |
|---------------------|-----|------|-------------------|-------------------|
| Individual athletes | 200 | 3.87 | 198 | 0.03* |
| Team athletes | | | | |

On the other hand, we used the one way analyses of variance method to determine the differences between individual and team athletes groups in burnout components (in separately for each groups). Results showed that differences between team athletes group with $F=5.234$ was significant at the level of $P<0.05$. The Bonferroni post hoc showed that all three component were significant in this group ($P<0.05$). Also, Based on our results differences between individual athletes group $F=5.234$ was significant at the level of $P<0.05$. The Bonferroni post hoc showed that only differences between personal accomplishment component was significant ($P<0.05$).

Conclusion

The purpose of this research was to investigation and evaluation of stress and burnout levels among individual and team athletes. Our results showed that the team athletes had higher scores in stress variable rather than individual athletes. Furthermore, the one way ANOVA results showed that differences between team athletes in 3 burnout components was significant, but in individual athletes only personal accomplishment component was significant ($P<0.05$). Our results in consistence with Pil Ha et al. (2010), Kelly et al. (1999) and Kelly (1994) researches. These authors reported that stress and burnout levels were significant in athletes.

With the increased pressures and stress related to job performance, it has become increasingly apparent that individuals are adversely affected by this type of environment. Often the end result is a phenomenon that has been termed burnout. The research on burnout has commonly focused on the human service and helping professions due to the close personal interaction between client and helper. However, more recently burnout has also been studied in reference to coaches and athletes (22). One of the first to focus on burnout was Freudenberger (1974), who developed a clinical approach to it and based his model on a paradigm that relied on case studies and different psychological aspects of an individual (23). In essence, it was the individual's psychological capabilities to deal with a stressful situation that concerned Freudenberger. Others such as Maslach (1976) have taken an empirical approach to burnout, concentrating on situational and environmental factors that interact with an individual's characteristics. Specifically, Maslach felt that excessive demands placed on individuals and their resources resulted in increased levels of stress (12).

Two models of burnout were used in the current study as bases for constructing the models to be examined. In Smith's (1986) model, personality variables have indirect effects on burnout through the cognitive appraisal of stress (24). Kelley et al.'s (1999) model takes this relationship a step further by identifying that personal and situational variables can have both direct and indirect effects on burnout. In their model, personal/situational variables indirectly impact burnout through perceptions of stress (25). In addition, these variables were proposed to directly impact levels of

burnout based on Smith's (1986) suggestion that personal and motivational variables may also directly impact an individuals' development of burnout. In the present study, perfectionism, broadly defined as the effect of overly critical evaluations and high personal standards on the setting of personal goals was viewed as a personality variable (24). Lazarus's (1999) proposal of the appraisal of stressors impacting the stress response provides support for a link between perceived stress (PS) and perfectionism. Thus, when an individual high in perfectionism encounters a stressor it may be that he/she appraises the situation as more threatening (26).

On the other hand, several researchers have suggested theoretical compositions of burnout and the prevalence of many scales indicates these varying views on the construct (10,27). The most prevalent measure of burnout is the Maslach Burnout Inventory (MBI). The MBI is comprised of three subscales, exhaustion, cynicism, and reduced personal accomplishment. These constructs have been hypothesized to slowly occur in this order, creating a downward spiral of resources (28). Exhaustion consists of a feeling of not being able to give any more emotionally to the job because people have nothing more to give (18). Depersonalization, later re-conceptualized as cynicism, is an attempt to distance one's self from the job and clients by actively ignoring the job and client's unique and engaging qualities. Reduced personal accomplishment is a decrease in one's perceived professional efficacy (18).

Modern theories of personality suggest that individuals' dispositions affect their interpretations of and reactions to their environments. In their cognitive-affective personality system, Mischel and Shoda (1995, 1998) theorize that individuals' personalities affect how they encode or evaluate information from their environments. It is argued that individuals' mental encodings of their expectancies and beliefs, their affective and physiological reactions to events, and their self regulatory plans control impulsive behavioral tendencies, frustrations, and fears (29). These encodings, referred to as cognitive-affective units, serve as mediators explaining personality-behavior relationships (30). While never specifically mentioned, job burnout may serve as a set of mental encodings that individuals have concerning their reactions and responses to ongoing stress at work or sports fields.

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