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EVALUATION AND COMPARISON OF BURNOUT LEVELS IN BASKETBALL, VOLLEYBALL AND TRACK AND FIELD COACHES

Key words: burnout, basketball, volleyball, track and field, coaches.

ABSTRACT

The term professional burnout has been defined as a multidimensional syndrome of emotional exhaustion, depersonalization and lack of personal accomplishment in result of labour stress [20]. The aim of this study was to evaluate the burnout level of Greek basketball, volleyball and track and field coaches as well as to highlight possible differences between the three sports. 452 coaches in total ($n_1=170$, $n_2=118$, $n_3=164$) completed the burnout questionnaire (MBI) [26]. The research results showed that basketball coaches reported higher emotional exhaustion and depersonalization as compared with coaches of the other sports, and they also displayed explicit tendencies for burnout. Volleyball coaches reported moderate levels of burnout, while track and field coaches did not display exhaustion. It can be concluded that team sport coaches, due to the extended competition season, experience considerable levels of professional burnout.

INTRODUCTION

Herbert J. Freudenberger [7] was the first researcher who studied systematically the phenomenon of burnout in order to explain the syndrome that tortured workers in nursing institutions as well as other social services. After intensive observations and studies, he coined the term “burn-out” and described the “victim” as “someone in a state of fatigue or frustration brought about by devotion to a cause, way of life, or a relationship that failed to produce the expected reward” [7]. The burnout appears slowly, develops in a chronic situation and is manifested with physical and behavioral symptoms such as “feeling of exhaustion and fatigue, feeling of pressure and being overburdened, rigid, stubborn and inflexible thinking,

depression, and working longer hours while accomplishing less and less” [7].

The systematic research by Maslach [17, 18, 19, 20] and her colleagues [21, 22, 23, 24, 25, 26, 27, 28, 29] greatly contributed to the understanding of the burnout syndrome, gave the term a more complete definition, but also led to creation of a psychometric instrument of the burnout degree. The Maslach Burnout Inventory (MBI) [26] is the most common method of measurement of the workers’ burnout degree in their working environment. The construction of the MBI contributed to the empirical study of burnout and led to the functional definition of the term. On the basis of a data corpus and study results Maslach and her colleagues determined burnout as a syndrome of *emotional exhaus-*

tion, *depersonalization* and *reduced personal accomplishment* that can be met in social professions [20].

The 1980s saw a number of interesting studies into professional burnout, also concerning the “coaching profession” affected by it to a significant extent. Initially the burnout syndrome was researched in view of individual characteristics (age, professional experience, gender, family status, etc) of coaching, essentially in team sports [2, 3, 6, 16]. Then a theoretical model of burnout was developed which stressed relations and reciprocal interactions between casual, cognitive, biological and behavioral factors. It offered new dimensions to the study of professional burnout within the athletic community [30]. Studies into professional burnout began to examine various personal and environmental factors such as leadership style, hardiness, stress and social support [1, 8, 12, 13, 31].

An important stage in burnout research was a study of relations between stress and burnout in 915 basketball and tennis coaches. Its results showed that this category of professionals experienced lower burnout levels [26]. Also basketball coaches who had worked with the best teams, displayed increased levels of emotional exhaustion and depersonalization. Moreover, coaches with an exclusive occupation in the coaching profession reported increased levels of burnout than those with more than one job or part-time job.

During the 1984 conference of the National Association of Athletic Trainers the researchers aimed to determine the degree of stress and professional burnout experienced by coaches. The participants were provided with questionnaires to collect information on their individual characteristics, and stress and burnout levels. The results showed that 40% of the conference participants were classified as exhausted or particularly exhausted professionals [4].

Another important study of the burnout syndrome [5] concerned individual characteristics of 302 team sport and individual sport coaches. This was a unique study which provided data from coaches of basketball, volleyball and track and field activities. The findings of the study showed that basketball coaches suffered from increased burnout levels as compared with volleyball and track and field coaches. Also the results of another study [10] on a sample of basketball and tennis coaches were similar. They showed that basketball coaches suffered from higher burnout levels than tennis coaches. The most important stress factor in both samples was “pressure to win.”

Another similar study examined burnout and the intention to quit in a sample of 224 football coaches [5]. The football coaches were found to be unaffected by the syndrome, and professional burnout was not a strong predictor of the “intention to quit” factor.

In one recent study a model of stress and burnout in 261 male and female tennis coaches was examined. The results of this study showed that the sample demonstrated moderate levels of emotional exhaustion ($M=16.19$), low levels of depersonalization ($M=5.27$) and decreased personal accomplishment ($M=38.53$) [13].

These results are in accordance with those of higher education professionals (emotional exhaustion $M=18.57$, depersonalization $M=5.57$ and personal accomplishment $M=39.17$) [26].

Conclusively, the above empirical studies added theoretical knowledge to the comprehension of the burnout phenomenon, with regard to the coaching profession. Also, the burnout syndrome appeared to afflict more high level coaches of team sports and low level coaches of individual sports in all three dimensions of professional burnout. It is obvious that stressful situations in coaching can facilitate professional burnout.

The aim of this research was (a) to evaluate the degree of professional burnout experienced by basketball, volleyball and track and field coaches and (b) to find possible differences in all three burnout dimensions between coaches of the three sports. Two research hypotheses were formulated i) basketball and volleyball coaches experienced increased burnout levels as compared with track and field coaches; ii) the burnout levels experienced by coaches were similar with the burnout levels afflicting higher education professionals.

METHODS

Sample

The participants in the study were 452 basketball, volleyball and track and field coaches ($n_1=170$, $n_2=118$, $n_3=164$), aged 39.16 ± 7.35 , 38.45 ± 7.96 and 40.91 ± 8.16 respectively.

Instruments

The selection of the MBI was based on the theoretical framework of the burnout research. The MBI criteria were (a) frequency of application of the questionnaire in the athletic community and (b) controlled validity and reliability in the Greek population [14].

The MBI questionnaire consisted of 22 items and assessed the frequency of relative emotions on a 7-point Likert type scale ranging from never (0) to every day (6). The questionnaire provided information about the subscales of *emotional exhaustion*, *depersonalization* and *reduced personal accomplishment*. The subscale of emotional exhaustion consisting of 9 items provided information about the respondents' feelings of being emotionally overloaded, depleted and exhausted by work (e.g. "I feel emotionally drained from my work"). The subscale of depersonalization consisting of 5 items and characterized unfeeling and impersonal response toward the athletes (e.g. "I have become more callous toward people since I took this job"). The personal accomplishment subscale containing 8 items assessed the achievement of a specific job (e.g. "I have accomplished many things in this job").

The degree of experienced burnout in higher education professionals was classified at low, moderate and high levels with norms established for each subscale [26]. These norms had been used by a number of researchers in the athletic community (Table 1).

Table 1. Established norms of professional burnout in higher education (Maslach & Jackson, 1986)

Burnout	Levels		
	Low	Moderate	High
EE	≤16	17-26	≥27
DE	≤8	9-13	≥14
PA	≥37	31-36	≤30

Note. EE=Emotional Exhaustion, DE=Depersonalization, PA=Personal Accomplishment

High emotional exhaustion and depersonalization reflected increased burnout levels, while for in the subscale of personal accomplishment the high rates corresponded to low burnout levels.

Statistical analysis

The statistical analysis in the study incorporated distribution and deviation indices for the evaluation of the coaches' burnout levels as well as one way analysis of variance (post hoc, Tukey test) for the comparison of possible differences between the three samples for all the three subscales of the burnout syndrome. The statistical analysis was per-

formed with SPSS 10.0 statistical software, with the level of statistical significance at $p < 0.05$.

RESULTS

Reliability of the scale

The MBI instrument had been widely used in social sciences and sports research yielding satisfactory indicators of reliability [14]. For the Greek population the studies had demonstrated adequate internal consistency. Table 2 presents the Cronbach alpha indices for the three subscales. For all of the three samples, the Cronbach alpha index appears satisfactory for the three subscales.

Table 2. Internal consistency index (Cronbach alpha)

Scale	Basketball $n_1=170$	Volleyball $n_2=118$	Track and Field $n_3=164$	Total $N=452$
EE	0.78	0.73	0.79	0.78
DE	0.73	0.59	0.65	0.71
PA	0.71	0.65	0.73	0.71
BURNOUT	0.78	0.68	0.68	0.74

Note. EE=Emotional Exhaustion, DE=Depersonalization, PA=Personal Accomplishment

Burnout levels

The analysis of the results shows that coaching burnout in the three sports ranges from low to moderate (Table 3). Specifically, the basketball, volleyball and track and field coaches experienced moderate levels of emotional exhaustion ($n_1=20.12 \pm 8.89$, $n_2=18.51 \pm 8.4$ and $n_3=18.15 \pm 9.48$, respectively). Moderate levels of depersonalization were experienced by basketball coaches ($n_1=9.68 \pm 6.39$), and low levels by the other two samples ($n_2=6.36 \pm 4.76$, $n_3=5.25 \pm 4.93$). As for the personal accomplishment subscale, the three samples demonstrated decreased levels of these feelings ($n_1=39.89 \pm 5.52$, $n_2=37.65 \pm 6.27$ and $n_3=40.12 \pm 6.12$, respectively). On the basis of the previous results and established norms it can be concluded that basketball coaches experience more often moderate levels of feelings in two of the three burnout subscales as compared with the other two samples.

Table 3. Means and standard deviations of the burnout subscales for the three samples

Subscales	Basketball	Volleyball	Track and Field
EE	20.12±8.89	18.51±8.4	18.15±9.48
DE	9.68±6.39	6.36±4.76	5.25±4.93
PA	39.89±5.52	37.65±6.27	40.12±6.12

Note. EE=Emotional Exhaustion, DE=Depersonalization, PA=Personal Accomplishment

Emotional exhaustion

The basketball coaches demonstrated increased feelings of emotional exhaustion as compared with the other two samples of coaches, but those differences were not statistically significant ($F_{(2, 449)}=2.214$, $p>.05$, Table 3).

Depersonalization

The results of the variance analysis ($F_{(2, 449)}=29.171$, $p<.001$) showed significant differences concerning depersonalization between the three samples of coaches. The basketball coaches showed increased feelings of depersonalization in comparison with the volleyball ($p<.001$) and track and field coaches ($p<.001$), while no significant differences were found between the volleyball and track and field coaches.

Personal accomplishment

In regard to personal accomplishment, no statistically significant differences were found between the three samples ($F_{(2, 449)}=6.865$, $p<.001$). The volleyball coaches experienced reduced feelings of personal accomplishment in comparison with the basketball coaches ($p<.01$) and track and field coaches ($p<.01$). No statistically significant differences were found between the basketball and track and field coaches.

DISCUSSION

The aim of the present study was (a) to evaluate the experienced burnout levels in coaches of three different sports, and (b) to compare possible differences in the three burnout dimensions.

The professional burnout levels experienced by coaches of the three sports were in accordance with the findings from previous studies, i.e. similar with those of higher education professionals [26]. Also, the basketball coaches experienced increased burnout levels in two of the three dimensions as

compared with the volleyball and track and field coaches [5].

In the case of emotional exhaustion no statistically significant differences were found between the samples. However, it is apparent that the experienced levels of this subscale of professional burnout were almost twice higher for basketball coaches. Statistically significant differences were reported in the dimension of depersonalization between the basketball coaches and the remaining two samples. It is remarkable that the level of depersonalization experienced by the basketball coaches was almost twice higher than the level experienced by the track and field coaches. As for personal accomplishment the volleyball coaches experienced burnout more often than the other two samples of coaches. This might be a result of undervaluation of their contribution to coaching players and of their dissatisfaction with coaching achievements.

In total, the team sports coaches reported stronger feelings of exhaustion and depletion than the individual sport coaches, while the basketball coaches reported the strongest burnout feelings. This finding is in accordance with previous research results [15] indicating that coaches of the more spectacular sports, particularly of basketball, football and volleyball experienced higher burnout levels.

While the extended stress periods are the main cause of burnout [9, 30] as well as its most significant predictor [13] it can be concluded that coaches of team sports remain under stronger pressure. This pressure and stress result from the long eight-month coaching seasons characteristic of the team sports. The coaches' challenge of defeats is a repeated fact during the season. Furthermore, another important factor differentiating the stress levels between team and individual sports coaches could be the financial dimension of the sports, which can add more stress to an already tense situation and lead to professional burnout. Another difference between the two kinds of sports is that coaches of individual sports manage a small number of athletes as compared with team sports coaches who take care of greater numbers of athletes of different age and cultural and educational background. Also the team sports coaches have to handle numerous contentions and conflicts between individuals.

Conclusively, track and field coaches are ranked below the established burnout norms, whereas team sports coaches suffer more often from moderate burnout feelings. However, fool-proof conclusions about permanence or impermanence of the syndrome can be only obtained by way

of more comprehensive studies over an entire competitive season, and not only during the most of least tense periods.

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