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STRESSORS AMONG SOUTH AFRICAN SOCCER OFFICIALS: A PROFILE ANALYSIS

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ABSTRACT

The purpose of this study was to determine the contribution of selected stressors to the level of stress experienced by South African soccer officials. Forty-two South African Football Association (SAFA) accredited officials, attending a training camp in Potchefstroom, participated in this study. The group comprised of 40 male and two female officials. The average age of the officials was 37.52 (±6.09) years, and the period for which they were accredited as a SAFA official ranged from 2 to 27 years. The Ontario Soccer Officials' Survey (OSOS) was used to determine the perceived levels of stress. The results indicated that fitness concerns were rated as the highest contributor to the stress experienced followed by role-culture conflicts, fear of failure, peer conflicts, interpersonal conflict, time pressures and lastly, fear of physical harm. The Spearman Rank Order Correlation showed a high correlation between the number of years the officials were accredited with SAFA and the total level of stress they experienced. Furthermore, the results indicated that 60% of the officials, who served as an accredited official for longer than 12 years, experienced five to seven stressors, which contributed to the total level of perceived stress.

Key words: Soccer; Officials; Acute stress; Certification; Sport; South Africa.

INTRODUCTION

Stress and anxiety among athletes have been the interest of various researchers in the field of sport and exercise psychology. However, little attention has been given to officials, judges, referees or umpires (Burke & Miller, 1990). Sport officiating can be a very stressful experience, characterised by stress and anxiety, consequently leading to various stress-related illnesses (Constable, 1996; Voight, 2008). Stress can be defined as "an imbalance in physiological and psychological systems that activate physiological and behavioural responses to restore balance" (Buckworth & Dishman, 2002:75).

Stress that is often experienced by officials includes, making mental, physical or performance related errors, as well as environmental conditions (crowd behaviour, noise, coaches and managers) (Anshel & Weinberg, 1999). The stress experienced by sport officials could have a significant impact on the officials' mental health, attention focus, concentration, effort,

arousal, performance, satisfaction with their profession and intention to quit officiating (Taylor *et al*., 1990; Goldsmith & Williams, 1992; Gencay, 2009). Due to the negative consequences of stress, some researchers have investigated the stressors among sport officials (Balch & Scott, 2007). Findings from the preceding studies indicated that sport officials often experience various forms of acute (short-term, time-limited) stress during games. The intensity of the acute stress might vary as a function of age and culture. The inability to effectively deal with acute stress can be detrimental to both the performance and personal satisfaction of sport participants (Kaissidis-Rodafinos & Anshel, 2000). Although the abovementioned research was conducted on sport participants, the same negative consequences of acute stress are expected from soccer officials.

A few studies utilising similar questionnaires on soccer, volleyball and basketball officials, identified verbal abuse, fear of failure and mistakes, time pressures, fear of physical abuse, intrapersonal and peer conflicts, role conflicts and game pressure as potential stressors (Taylor & Daniel, 1987; Goldsmith & Williams, 1992; Rainey, 1995). In their study of basketball officials, Anshel and Weinberg (1995) found that making wrong calls, verbal abuse by coaches, threats of physical abuse and being in the wrong position on the court were the top four stressors. A study on Turkish basketball referees identified problems working with a partner, making a wrong call, threats of physical abuse, experiencing pain or injury and verbal abuse as the top five stressors (Ekmekci, 2008). These stressors were divided into two categories, namely 'stressors relevant to performance' and 'stressors related to the presence of others'. Interviews and document analysis were also used to determine existing stress, which revealed a lack of motivation, lack of experience, personal insufficiency, level of personal improvement and fear of making a wrong call, as the five top sources of existing stress (Ekmekci, 2008). No study could be traced regarding the stressors experienced by South African soccer officials.

The purpose of this study, therefore, was to determine the acute stressors experienced by South African soccer officials. The results of this study would alert mental skills trainers to the perceived sources of acute stress by soccer officials, which could lead to the development and application of appropriate stress management intervention programmes or techniques. In addition, assessing these stressors could be an important aspect in identifying and treating officials, who might be at the risk of negative consequences of excessive stress (Goldsmith & Williams, 1992).

METHODS

Participants

Forty-two (42) South African Football Association (SAFA) accredited officials, attending a training camp at the High Performance Institute in Potchefstroom, South Africa, participated in this study. The group comprised of 40 male and 2 female officials. The average age of the officials was 37.52 (±6.09) years, and the period of being a SAFA accredited official, ranged from 2 to 27 (M=10.55±5.54) years.

Procedure

A mental skills trainer administered a single questionnaire to the officials attending a mental skills training workshop. This was done in a classroom setting, before the start of the workshop. Detailed instructions appeared on the front cover of the questionnaire, which required their demographic information (name, surname, age, gender, referee or assistant referee, years of service as soccer official, and accredited years as a SAFA official). The officials were ensured about the confidentiality of the results. They provided permission that their responses may be used for research purposes. The officials were free to discontinue their participation at any stage of the study.

Questionnaire

The Ontario Soccer Officials' Survey (OSOS) of Taylor *et al*. (1990) was used to determine the perceived levels of stress by the officials. The questionnaire consisted of 30 items, which contribute to one of the following seven subscales: role-culture conflict, fear of failure, interpersonal conflict, time pressures, fitness concerns, peer conflicts and fear of physical harm. The questions were ordered randomly.

The subjects were requested to indicate how much each situation would contribute to their stress levels on a 4-point Likert scale ranging from 0 to 3. A score of 0 indicates no contribution to the stress experienced, while a score of 1, 2 or 3 respectively indicates mild, moderate and strong contribution to the level of stress experienced by the official. Cronbach alpha reliability coefficients ranged from 0.65 to 0.88 for the seven subscales (Taylor, 1989; Taylor *et al*., 1990). Construct validity has been supported and significant relationships between scores on the OSOS and the hypothesized outcomes of burnout, satisfaction, intentions to quit, and actual turnover have been reported. The low to moderate correlations between stressor scales suggest independent constructs (Taylor, 1989; Taylor *et al*., 1990).

Statistical analysis

The Statistical Consultation Services of the North-West University determined the statistical methods and procedures for the analysis of the research data. All of the Cronbach alpha coefficients were approximately 0.7 or higher, except for role-culture conflict, which obtained a value of 0.55. Although Schmitt (1996:350) indicated that "even relatively low (e.g. 0.50) level of criterion reliability does not seriously attenuate validity coefficients", interpretation of this score should be done with caution. Item number 14 ("Players of coaches who protest decisions when they do not understand the laws of the game") was removed from the factor scale role-culture conflict. With item 14 included in the factor scale the Cronbach alpha coefficient was 0.49. After removing item 14, the Cronbach alpha coefficient increased to 0.55. Due to the few items per scale (less than 10 items) the mean inter-item correlation was also reported as a measure of internal reliability. Clark and Watson (1995) recommend an optimal range for the inter-item correlation of 0.15 to 0.55.

Descriptive statistics (mean, SD, minimum, maximum) for the factor scales were calculated using the Statistical Package for Social Sciences (SPSS) for Windows (Version 15.1). The

contribution of the stressors to the level of stress experienced by the official was determined by means of the mean value; the higher the mean, the stronger the contribution of the stressors to the level of stress experienced by the official. The relationship between the demographic information and the amount of stressors an official had experienced was investigated using Spearman Rank Order Correlation Coefficients. Thereafter frequencies were used to determine how many of the officials exhibited 0, 1 to 2, 3 to 4 or 5 to 7 of the stressors. Lastly, cross tabulation was used to determine the relationship between the risk categories and the years as a SAFA accredited official. Cut-off points were set at 25 and 75% respectively, which resulted in 3 groups, namely the low experience group (<7 years), average experience group (7 to 12 years) and the high experience group (>12 years).

RESULTS

The results of this study are presented in Tables 1-4.

TABLE 1: **DESCRIPTIVE STATISTICS AND INTERNAL CONSISTENCY FOR DEMOGRAPHIC VARIABLES AND SELECTED STRESSOR SCALES**

Variables	Rating	Min	Max	Mean	SD	Cronbach alpha's coeff.	Mean Inter-Item correlation
Age		23	46	37.52	6.09	N/A	N/A
Years as official		6	31	16.10	6.88	N/A	N/A
Years SAFA accredited official		2	27	10.55	5.54	N/A	N/A
Fitness concerns	1	0	3	2.02	0.76	0.67	0.41
Role-culture conflict	2	0	3	1.82	0.86	0.55	0.24
Fear of failure	3	0	3	1.73	0.72	0.85	0.48
Peer conflicts	4	0	3	1.57	0.88	0.81	0.52
Interpersonal conflict	5	0	3	1.37	0.75	0.74	0.48
Time pressures	6	0	3	1.28	0.85	0.79	0.49
Fear of physical harm	7	0	3	1.23	0.91	0.83	0.50

TABLE 2: **SPEARMAN RANK ORDER CORRELATION BETWEEN AMOUNT OF STRESSORS AND DEMOGRAPHIC INFORMATION**

Demographic information	Risks	
	Correlation coefficient	p-Value
Age	0.03	0.85
Years as official	0.19	0.23
Years as SAFA accredited official	0.37	0.02*

* $p \leq 0.05$ (2-tailed)

TABLE 3: **FREQUENCY OF STRESSORS EXPERIENCED BY SOCCER OFFICIALS**

Stressors	Frequency	Percentage
0	12	28.6
1-2	15	35.7
3-4	10	23.8
5-7	5	11.9
Total	42	100.0

TABLE 4: **RISK CATEGORIES AND YEARS AS A SAFA ACCREDITED OFFICIAL**

		Years as a SAFA accredited official							
Risk categories	Stressors	Low (<7)		Average (7-12)		High (>12)		Total	
		Count	%*	Count	%*	Count	%*	Count	%*
0	0	3	25.0	7	58.3	2	16.7	12	100.0
1	1-2	4	26.7	11	73.3	0	0	15	100.0
2	3-4	1	10.0	5	50.0	4	40.0	10	100.0
3	5-7	0	0	2	40.0	3	60.0	5	100.0
	Total	8	19.0	25	59.5	9	21.4	42	100.0

Based on the results in Table 1, it is clear that the internal reliability of all the subscales were acceptable. Fitness concerns (M=2.02) were rated as the highest contributor to the stress experienced by officials, followed by role-culture conflicts (M=1.82), fear of failure (M=1.73), peer conflicts (M=1.57), interpersonal conflict (M=1.37), time pressures (M=1.28) and lastly, fear of physical harm (M=1.23). From Table 2 it seems that the longer an official was officiating as a SAFA accredited official, the higher the perceived level of stress. In Table 3 the majority (35.7%) of officials indicated that 1 or 2 stressors had a great contribution to the total level of the stress, which they experienced. Table 4 indicates that 60% of the officials, who served as an accredited official for longer than 12 years, fell in the third risk category, that, is they experienced 5 to 7 stressors that contributed to the total perceived level of stress.

DISCUSSION

Soccer is the most popular sport worldwide and attracts both the greatest number of participants, as well as spectators. In South Africa, soccer is also one of the most popular sports together with rugby and cricket. Soccer matches are intensely followed, as is demonstrated by the 3.18 million fans, who attended the 64 matches during the 2010 Soccer World Cup held in South Africa (FIFA, 2010). In addition to the worldwide popularity of soccer, another phenomenon, called 'football hooliganism' added to the rationale for this study. Football hooliganism includes forms of verbal and physical violence against players, match officials, as well as spectators. It also includes vandalising club and private property (Dunning, 2000). Despite the popularity of soccer and a large amount of research conducted on soccer, only two studies could be traced reporting stress experienced by soccer officials.

The purpose of this study was to examine the levels of stress experienced by South African soccer officials regarding some selected stressors as suggested by the OSOS (Taylor *et al*., 1990). In contrast to previous studies, this study revealed that fitness concerns contribute most to the total level of stress experienced by these officials. During a soccer match, it is the responsibility of the official to implement the rules of the game and to ascertain that players abide by these rules. This implies that the officials have to keep up with the play and be in a good position to judge any offence on the field (Reilly & Gregson, 2006). Therefore, inadequate fitness will prohibit officials from keeping up with the play and will consequently cause stress.

Various studies have identified role conflict as a source of stress amongst officials (Taylor & Daniel, 1987; Goldsmith & Williams, 1992; Rainey, 1995). Taylor (1989) points out that in a 'win-at-all-cost' oriented society, the official may be constantly involved in a role-culture conflict, especially since an official's integrity is often questioned by players, coaches and the crowd, usually in an attempt to have decisions changed in their favour. Officials experience immediate, unrestrained negative feedback throughout and after a match (Wolfson & Neave, 2007) and are often targets of unruly crowds, agitated coaches and aggressive players (Weinberg & Richardson, 1990). Winning teams rarely mention the quality of officiating, while losing teams or players often blame at least part of the loss on the referee (Constable, 1996). The findings of the current research support those of these previous studies. Role-culture conflict was found to be a source of stress among the South African officials.

Weinberg and Richardson (1990) stated that fear of failure is at the core of most officials' anxiety. In the context of this study, fear of failure includes refereeing an aggressive game, having a 'bad' game, handling a critical game for one or either team(s), facing critical decisions during a game, maintaining concentration during a strenuous game and fear of making 'bad' calls. In support of the findings of this study, various other studies on soccer, volleyball and basketball also identified fear of failure as a source of stress among the officials (Taylor & Daniel, 1987; Goldsmith & Williams, 1992; Rainey, 1995).

Peer conflict can be a major source of stress for people who are regarded as authority figures (Constable, 1996). According to Constable (1996), officials have very few people that they

trust and the idea of having unpleasant relationships with one's peers must be extremely stressful for individuals who find themselves in such a situation. The results of this study support previous research findings (Taylor & Daniel, 1987; Goldsmith & Williams, 1992; Rainey, 1995), keeping in mind that officials identified peer conflicts as the fourth most important source of stress.

Intrapersonal conflicts such as dealing with over excited or hostile coaches, personality clashes with players or coaches, as well as personality clashes with club officials or spectators were identified as the fifth most important source of stress among the soccer officials. Previous studies on officials from different sport codes found intrapersonal conflict to be a source of stress (Taylor & Daniel, 1987; Goldsmith & Williams, 1992; Rainey, 1995; Haralambos *et al*., 2005), which substantiates the results of the present study.

Time pressures are stressors that evolve over a period of time as officials attempt to cope with refereeing, which takes them away from their families, friends and jobs (Constable, 1996). As in previous studies (Taylor & Daniel, 1987; Goldsmith & Williams, 1992; Rainey, 1995; Constable, 1996), time pressures were found to be a source of stress among the soccer officials.

Soccer officials identified spectators, players, coaches, trainers and other administrators as sources of aggression (Folkesson *et al*., 2002). There are recorded cases of players and coaches physically assaulting officials, throwing equipment at officials and yelling and screaming at them (Balch & Scott, 2007). In April 2002, two referees were attacked by players in separate incidents in Africa, when a team mate was sent off and a goal disallowed (Wolfson & Neave, 2007). It is interesting to note that the South African soccer officials identified fear of physical harm as the least important source of stress.

From the above-mentioned discussion, it is clear that South African soccer officials experience similar stressors as officials mentioned in previous studies, although the order prevalence differs. Fitness concerns were rated as the highest contributor to the stress experienced by South African officials, followed by role-culture conflicts, fear of failure, peer conflicts, interpersonal conflict, time pressures and lastly, fear of physical harm. In a study of Taylor *et al*. (1990) on Canadian soccer officials, fear of failure was rated as the highest contributor to the stress they experienced followed by role-culture conflicts, time pressures, interpersonal conflict, peer conflicts, fitness concerns and lastly, fear of physical harm.

It is clear that the major differences in the two country's ranked order of the stressors were regarding fitness concerns and time pressure. The reason for South African officials rating fitness concerns as the highest contributor to the stress they experience might by attributed to the emphasis FIFA places on the importance of a referees' physical fitness. Three top South African referees failed a Confederation of African Football fitness test and were consequently suspended from officiating locally, as well as internationally (Kwenaite, 2011). It is, therefore, clear that not being physically fit might have severe consequences for a referee's officiating career, an issue that is regarded as very serious by South African officials.

Concerning time pressures, the Canadian officials ranked the stressor third while the South African officials ranked the same stressor sixth. Taylor and Daniel (1987) found that 44.9% of the 215 officials in their study spent between 13 to 18 hours a week officiating. According to Adeel Carelse, match commissioner for the South African Football Association (SAFA), South African officials called to officiate one or two matches a week, for which they need at least three hours per game (Jackson, 2011). It is clear that Canadian officials spend significantly more time officiating in comparison with their South African counterparts, which might take them away from their jobs, families and friends more frequently.

Sport officials are responsible for ensuring that the efforts of participants during a match, takes place within the rules of the game (Mathers & Brodie, 2011). During high-profile events, the responsibility of officiating has been associated with elevated levels of stress due to the large number of spectators (Petterson-Lidbom & Priks, 2010), physiological demands (Catterall *et al*., 1993), the importance of certain games (Folkesson *et al*., 2002) and hooliganism (Dunning, 2000). Table 2 indicates a correlation between the years accredited as a SAFA official and the level of stress experienced by the officials. To further support the above results, Table 4 indicates that 60% of the officials, who served as an accredited SAFA official for longer than 12 years, experienced 5 to 7 stressors that contribute to the total level of stress they perceived, while only 16.7% of the officials, who served less than 7 years experienced 5 to 7 stressors. This may be attributed to the fact that more experienced officials will be used to referee high-profile games and thus may lead to elevated levels of stress among the more experienced officials.

CONCLUSION

Based on the results of this study, it is evident that South African soccer officials experience similar stressors as officials mentioned in previous studies, although the order may differ. The majority of officials indicated that 1 or 2 stressors had a great contribution to the total level of stress they experienced. An interesting finding was that 60% of the officials who served as an accredited official for longer than 12 years, experienced 5 to 7 stressors that contribute to the total level of stress they experienced placing them in the high risk. The results of this study could be used to alert management about the perceived stress experienced by the officials while doing their job.

Coaches and players need to be informed of the results of such studies in order to dispel ignorance and improve understanding with regard to the various stressors experienced by officials. The ongoing provision of education, continuous evaluation and follow-up, is needed to improve officials' quality of officiating and quality of life, as well as to reduce their stress. This would lead to greater enjoyment in being a referee. Early identification of officials who might be at risk to the negative consequences of high stress is important in order to ensure effective interventions to reduce stress factors and increase coping skills. Future research is needed to investigate the coping styles used by South African soccer officials, as well as to apply and evaluate preventive mental skills training programmes to assist officials in dealing more effectively with the stressors experienced before, during and after matches.

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