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The Relationship between General Health and Job Stress of Referees

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ABSTRACT: This study aimed to assess the relationship between general health and job stress of active and inactive referees. Sample consisted of all referees that were on the list of the Khuzestan Province Referees Committee in 2013-2014. To gather the study data, three questionnaires of *Personal Traits Questionnaire*, *Nacey's Referee Stress Questionnaire*, and *Goldberg General Health Questionnaire* were used. Kolmogorov-Smirnov and Pearson's correlation coefficient tests were used to data analysis. Results showed a significant relationship between general health and job active group, while the relationship between general health and job stress wasn't significant for inactive referees. It seems that despite the high level of job stress in active referees might threaten their health; they can manage its catastrophic effects by using some psychological skills and experiences.

***Keywords*:** General health, job stress, referee.

INTRODUCTION

In recent years, soccer has become the loveliest, widespread, and most popular sport in most countries of the world, and it is not anymore a mere sport, but it has turned a social phenomenon. Also, given the reception of spectators and financial sponsors and enormous heavy contracts, soccer has become a highpaying industry in most countries. Today, like other sectors, the topic of football refereeing has assumed a scientific form, and requires education and experience. Decisions of a referee in soccer field can affect behaviors and actions of all players, coaches, spectators, match custodians, and clubs (Hampton, 2006). Studies show that referees have a determining role in the soccer economy, and especially in the professional level, consequences of referees' judgment leave a deep impact on the result of a game (Maughan, 2006; Kastagna et al, 2007). After coaches and players, referees form the third important element of sport matches, while they have one of the most difficult sport duties. A referee's most important role is to make sure that games are held fairly and properly, and match regulations are considered by players, coaches, and the respective personnel, as well as keeping players and coaches calm during the games (Baldwin, 2008). Especially in the soccer game, judgment is a challenging and exciting profession that puts many physical and mental pressures on referees. The phenomenon of competition and match intrinsically results in applying stress on both players and referees. Lack of respect, constant abuse from the side of players, coaches, and spectators, as well as criticisms by journals and reporters, all in all lead to great pressures in referees and even their decision to abandon the job (Baldwin, 2008). Referees' job stresses are positively connected with illness, and their mental states and problems (Andy, 2006).

Levinson (1998) considers general health as an individual's feeling regarding health status, feeling of exhaustion,sensual-bodily receptions often accompanied with physical arousal, stress and insomnia, individuals' ability in countering professional preferences and daily issues, and their feelings regarding life and how to deal with popular life situations, depression, and tendency to suicide. General health criteria include physical symptoms, stress, disorder in social function and depression. Luthans (1995) defines stress as follows: "stress is a state in which an individual cannot sufficiently and beneficially respond to environmental stimuli, and responds to these stimuli in such a way that it costs individual exhaustion, and such complications as chronic fatigue, tension, worry, physical injuries, and sudden nervous uneasiness, and reduced self-confidence". Baldwin (2008)

considered the role of sport interpreters and journalists in imposing stress on Australian referees. Results suggested that the image that media make from a referee affects his decisions during a match, in the same way it contributes to their amount of stress. Baldwin (2008) also considered the amount of stress before and after gameson referees and match custodians in Australia. Results showed that referees are subject to many stresses such as abuse, disrespect from spectators and lack of financial sponsorship from custodians. Also, the results showed that those referees who are most exposed to stress, commit more mistakes in judgment, e.g. mistake in rules interpretation and unexpected incidents, leading to injuries in players and impairment of game results. Voight (2009) showed by considering stress in soccer referees of the USA universities that referees suffer from contradictions between judgment needs and family requirements, contradictory decisions, contradiction between judgment and work, wrong decision making, coaches' scurrility, wrong establishment and settlement, calling and pacifying aggressive players, players' scurrility, the importance of game result, and pressure from referee assessors or monitoring, and thus they become stressful. Gencay (2009) showed by considering stress resources of 156 soccer referees in Turkey that stress condition in these referees varies from weak to moderate, and there is no difference between referees and assistance referees. He concluded that these referees' amount of stress is not high. By investigating ice-hockey referees of Canada with six different levels of commentating degrees, Dorsch and Paskevich (2007) showed that aggressive arguments, the problem of working with assistant referees, and confronting coaches were present as the major resources of stress resources in all levels of referees. In another study Andy (2006) investigated the effect of crowded stadia on referees' judgment. The results of is study showed that referee's job stress is positively related with illness, states, and mental complications. By reviewing the literature concerned with stressful factors, conducted by Taylor and Daniel (1987) on soccer referees, Goldsmith and Williams (1992) on Volleyball and soccer referees, Anchell and Vinberg (1995) on basketball and baseball referees, Rainey (1995) on baseball and softball referees, Masson and Lovell (2000) on soccer referees, Thatcher (2005) showed that many stress factors are widespread in various sport fields, and certain stressful factors also exist in some fields, for example spectator clamors are very sensitive in different team fields such as soccer. Studiesconducted regarding the stress of Iranian soccer referees are very limited.Given the results of the studies conducted, it is observed that little studies have considered the relationship between job stress and general health. This work has been conducted with the aim of investigating the link between the job stress of soccer referees and their general health in active and inactive referees of the Khuzestan Province.

MATERIALS AND METHODS

This study was of a correlation survey type, done by questionnaire. The statistical population consisted of all active and inactive referees who, in 2013-2014, were in the list of referees committee of the Khuzestan Province (N=109). In the present study, active referee is an individual who has had refereeing activity at least within the previous year at a province level, and inactive referee is a referee who has not had a refereeing activity, at least over the last year. The study sample was selected as the total count, which included all 109 members of the population (population=sample). Data gathering tools consisted of the three questionnaires of personal traits (age, education, referee degree, referee level, and referee record), the Goldberg's General Health Questionnaire (with the dimensions of stress health, disorder in social functionality and depression), and the Nacey's Referee Stress Questionnaire (1994). To determine the reliability of the General Health Questionnaire two methods of Cronbach's alpha and the bisection method were used that produced 0.90 and 0.61 for the General Health Questionnaire and 0.92 and 0.63 for the Referee Stress Questionnaire, respectively. After reproduction, the questionnaires were offered to soccer referees of the Khuzestan Province. The offering, completion, and gathering of the questionnaires were performed by providing an official introduction paper from the university to the Khuzestan Department of Sport and Youth Affairs, multisession and verbal meetings of the researcher with authorities of the Soccer Referees Committee of Khuzestan Province in order to make them interested in cooperation with the study execution in the referees' level, and also by traveling to different cities of Khuzestan and providing questionnaires to the individuals who had not taken part in the coordination meeting of Khuzestan soccer referees (mostly applying to inactive referees), with the procedure taking almost 6 months. Also, after identifying referees who had not succeeded to take part in the sessions, they were contacted via the phone numbers the author had at his disposal, and then he went to their respective residence city, and after filling of questionnaires by these individuals, collected them. To analyze data, descriptive statistics (calculation of frequency, percent, mean, and standard deviation), Cronbach's alpha and Pearson's correlation coefficient were used via the SPSS software, version 17.

RESULTS AND DISCUSSION

The study sample consisted of 109 people including 58 active referees and 51 inactive referees (46.8 and 53.2 percent, respectively). Subjects aged 30 through 40 years old had the highest frequency of 52.3 percent, and subjects aged 40 through 50 years old had the least frequency of 5.5 percent, within the sample. As regards refereeing manner, within the active referees group, subjects with a national referee degree were 51.7 percent, and subjects with an international degree were 5.2 percent of the sample, and within the inactive referees group, subjects with a national referee degree were 74.5 percent, and subjects with

an international referee degree were 0 percent of the sample. As regards referee record, mean and standard deviation of referee record in active referees were 11.98 and 3.33 years, respectively, and in inactive referees, 15.27, and 5.94 years, and in all referees, 12.99, and 5.19 years, respectively. In terms of refereeing level, within the active referees group, subjects with the categories referee level had the highest frequency of 27.6 percent, and subjects with the league 3 referee level had the lowest frequency of 8.6 percent, and within the inactive referees group, subjects with a province referee level had the highest frequency of 31.4 percent and subjects with the categories referee level had the lowest frequency of 3.9 percent. In general, subjects with the province referee level had the highest frequency of 26.6 percent and subjects with league 2 referee level had the lowest frequency of 11.9 percent.

Considering the study hypotheses (tables 1 and 2) showed that there is a significant relationship between job stress and general health of active referees (r=0.379, P<0.05, P=0.003). But no significant relationship was observed between job stress and general health of inactive referees (r=-0.157, P>0.05, P=0.273). Also, a significant relationship was observed between job stress and physical symptoms of active referees (r=0.421, P<0.05, P=0.001). On the other hand, no significant relationship was observed between job stress and physical symptoms in inactive referees (r=-0.177, P>0.05, P=0.215). Between job stress and anxiety of active referees, a significant relationship was observed (r=0.366, p<0.05, P=0.005). However, the relationship was not significant in case of inactive referees (r=-0.137, P>0.05, P=0.337). No significant relationship was seen between job stress and disorder in social function (r=0.151, P>0.05, P=0.259), and this relationship was not significant for inactive referees, too (r=-0.008, P>0.05, P=0.956). No significant relationship existed regarding job stress and depression of active referees (r=0.249, P>0.05, P=0.059), and a lack of relationship was also observed for inactive referees (r=-0.163, P>0.05, P=0.253).

Table 1. Pearson's coefficients of correlation between job stress and general health in active referees

Index variable	Predictive variable	Correlation coefficient (r)	Level of significance (p)	Sample size (n)
General health	Job stress	0.379	P<0.05	58
Physical symptoms	Job stress	0.421	P<0.05	58
Anxiety	Job stress	0.366	P<0.05	58
Social functionality disorder	Job stress	0.151	P>0.05	58
Depression	Job stress	0.249	P>0.05	58

Table 2. Pearson's coefficients of correlation between job stress and general health of inactive referees

Criteria variable	Predictive variable	Correlation coefficient (r)	Level of significance	Sample size (n)
General health	Job stress	-0.157	P>0.05	51
Physical symptoms	Job stress	-0.177	P>0.05	51
Anxiety	Job stress	-0.137	P>0.05	51
Social functionality disorder	Job stress	-0.008	P>0.05	51
Depression	Job stress	-0.163	P>0.05	51

Also, results of the study implied lack of a significant relationship between job stress of active referees and that of inactive referees (F=0.021, P>0.05, P=0.886), general health of active referees and that of inactive referees (F=0.087, P>0.05, P=0.769), anxiety of active referees and that of inactive referees (F=0.151, P>0.05, P=0.699), social functionality disorder of active referees and that of inactive referees (F=0.321, P>0.05, P=0.572), and the depression of active referees and that of inactive ones (F=0.864, P>0.05, P=0.355) (table 3).

Table 3. coefficients of Pearson's correlation between study variables and its criteria in active and inactive referees

	Subjects	Frequency	Mean	Standard deviation	Mean standard error	Observed F	Level of significance
Job stress	Active	58	32.47	25.93	3.40	0.021	P>0.05
	Inactive	51	31.76	24.56	3.44		
General health	Active	58	15.24	9.21	1.21	0.003	P>0.05
	Inactive	51	15.16	8.11	1.14		
Physical symptoms	Active	58	3.47	2.81	0.37	0.087	P>0.05
	Inactive	51	3.31	2.53	0.35		
Anxiety	Active	58	4.67	3.41	0.45	0.151	P>0.05
	Inactive	51	4.92	3.27	0.46		
Social functionality disorder	Active	58	5.24	2.40	0.32	0.321	P>0.05
	Inactive	51	5.51	2.54	0.36		
Depression	Active	58	1.86	2.79	0.37	0.864	P>0.05
	Inactive	51	1.41	2.17	0.30		

Discussion and conclusion

The present study seeks to consider the relationship between job stress and general health of active and inactive referees of Khuzestan Province. Findings of the study showed that Khuzestan soccer referees are in a desirable status in terms of stress, and their amount of stress was less than the medium extent. This finding is in agreement with the results of several other studies conducted in regard to stress level of soccer referees. Gencay (2009) reported soccer referees' stress in a medium-to-lower level that is in line with the results of this study, but Dorsch and Paskevich (2007) reported the stress of soccer referees in a moderate level, and Goldsmith and Williams (1992) stated the stress of soccer referees in a medium-to-upper level. The findings of the present research showed a significant relationship between job stress and the criteria of physical health, physical symptoms, and anxiety in the referees group. It seems that higher levels of job stress might pose dangers to the physical health of referees, thus cultivating the appearance of some health-related issues and complications, and affliction by some physical diseases and anxiety in active referees. Nevill, Balmer and Williams (2002) reported a significant relationship between all factors of mental health and the factors of assimilation. Andy (2006) considers referee stress positively related with illness, and mental conditions and complications. The results of the present study showed that no significant relationship dominated between the job stress of active referees and that of inactive referees. This study's outcomes are not in line with findings of Chen et al (2005). The mentioned results might be due to the fact that inactive referees often are involved in other activities that are relevant to soccer judgment (e.g. judging other sport fields or judgment in school and college levels), and similar to active referees, they face certain challenges and stresses. Also, the results showed that no significant difference exists between the general health of active referees and that of inactive ones, and therefore, the general health of active referees and that of inactive referees are not considerably different from each other. Finally, despite the high level of job stress in active referees that might threaten their physical and mental health, they can probably manage its subsequent complications to some extent by acquiring some mental experiences and skills, so that job stress will not have a considerable and significant impact on the appearance of health problems among active and inactive referees.

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