

Social support and mental health in relation to sports injuries among football players

Dr. Mohammed Haggag

Associate Professor of Sport Psychology, King Saud University

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Keywords: sports injuries, sports psychology, Social support, mental health.

Abstract: Background: Sports injury was shown to be associated with Social support and psychological status of the players and that sports psychology had a positive impact on the practice of sports injury rehabilitation.

Aim: Thus, it is important to identify the factors associated with injury to establish preventive strategies. In this regard, the aim of the present study was to characterize the sports injuries and verify the associated psychological and social related factors with injuries among football players.

Methods: In this study, the correlation between social and psychological support, and the degree of sports injury were significantly characterized in 42 healthy football players. Organization and description of sports injuries, as well as social measures of the participants, were measured by prevalidated questionnaires'

Results: In this study, the correlation between social and psychological support, and the degree of sports injury were significantly characterized in 42 healthy football players. Based on the degree of the severity of sports injuries, the participants classified into groups; mild (n=21) and moderate (n=21). The results showed that players with moderate sports injury require more social support as shown in the increase in the scores of families, friends, self-satisfaction support (p=0.001). In addition, lower levels of psychological measures were significantly associated with severe sports injuries as in players with moderate scores compared to that present in players with no or mild scores.

Conclusion: the data support or proved that both social and psychological outcome measures are essential for better healthy football players and reduce the time to return to normal activities. In addition, personal goals, self-efficacy, and self-satisfaction along with social support were shown to play a significant role in injury rehabilitation among injured athletes.

تأثير الدعم الاجتماعي والصحة النفسية على تأهيل إصابة لاعبي كرة القدم

د. محمد يوسف حجاج

أستاذ علم النفس الرياضي المشارك، جامعة الملك سعود

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الكلمات المفتاحية: الإصابات الرياضية، علم النفس الرياضي، الدعم الاجتماعي، الصحة العقلية
ملخص البحث:

ترتبط الإصابة الرياضية بالدعم الاجتماعي والحالات النفسية للاعبين. بالإضافة إلى ذلك، فإن لعلم النفس الرياضي تأثير إيجابي على ممارسة إعادة تأهيل الإصابات الرياضية. من المهم تحديد العوامل المرتبطة بالإصابات لوضع استراتيجيات وقائية. في ضوء هذه الخلفية، فإن الهدف من هذه الدراسة هو توصيف الإصابات الرياضية، والتحقق من العوامل النفسية والاجتماعية المرتبطة بها بين لاعبي كرة القدم. تم قياس تنظيم ووصف الإصابات الرياضية، وكذلك التدابير الاجتماعية التي اتخذها المشاركون، من خلال استبيانات تم التحقق منها مسبقاً. ومن أهم النتائج وجود علاقة متبادلة بين الدعم الاجتماعي والنفسية ودرجة الإصابات الرياضية معنوية لدى 42 لاعباً من لاعبي كرة القدم الأصحاء. بناءً على شدة الإصابات الرياضية، تم تصنيف المشاركين إلى مجموعات: إصابة خفيفة (ن = 21) وإصابة متوسطة (ن = 21). وأظهرت النتائج أن اللاعبين الذين يعانون من إصابات رياضية متوسطة يحتاجون إلى مزيد من الدعم الاجتماعي، كما يتضح من زيادة عشرات من أفراد الأسرة والأصدقاء ودعم الرضا عن النفس (ع = 0.001). بالإضافة إلى ذلك، ارتبطت المستويات المنخفضة من التدابير النفسية بشكل كبير بالإصابات الرياضية الشديدة، مثل اللاعبين ذوي الدرجات المعتدلة، مقارنةً بالمستويات الموجودة لدى اللاعبين الذين لم يحصلوا على درجات إصابة أو إصابة خفيفة.

Introduction

The practice of sports provides benefits to the cardiopulmonary, musculoskeletal, and endocrine systems. Sports lead to improvements in motor skills and daily habits as well as the acquisition of dexterity, exerting an influence on the social and psychological aspects of practitioners. [1-4]

However, constant exposure to repetitive motor actions and excessive load particularly in football matches poses the risk of injury. Indeed, when players practice a sport for long periods, they are exposed to injury and, in this context, several risk factors can be considered. [5,6]

Sports injury refers to any physical complaint resulting from training and/ or competition that limited the participation of the individual for at least one day, regardless of the need for medical care. [7,8]

Sport injury was shown to be associated with psychological status of the players. Sport psychology education has been shown to have a positive impact on the practice of sport injury rehabilitation professionals (SIRPs).[9,10] Previous reports showed that sport psychology education is likely to have a positive impact on the sport psychology related to sport injuries.[11-12]. Previous studies showed that morbidity from injuries in young populations is substantial all over the world and recreational and sports injuries represent major risks for young people [2].

In most countries, many studies have been conducted on the prevalence and incidence of sports injuries during sport and exercise each year. [13-15] The incidence of injury was reported to be higher in the contact sports, such as football, basketball, compared to non-contact sports, particularly netball. [16-17]

There are other possibilities such as social status, sport enjoyment such as feelings of pleasure, liking, and fun and personal investments (e.g., time, emotional investments, personal identity) highlighted previously in sport models to improve psychological status of injured football players. [18-19] These parameters may be two key antecedents of continued sport involvement. Positive associations between enjoyment, personal investments and the desire to exert effort and persist in sport have been reported among elite athletes. [20-22] Clearly, sport enjoyment, social, psychological, and personal investments may be important factors enabling athletes returning from injury to remain committed to the pursuit of their athletic goals. [21-22].

Thus, it is important to identify the factors associated with injury to establish preventive strategies. In this regard, the aim of the present study was to characterize the sports injuries and verify the associated psychological and social related factors with injuries among football players.

Materials and Methods

Participants

A total of 42 of healthy football players aged 20-28 years old from different clubs; Al Hilal Saudi, Al Nasr, and Youth Club were randomly enrolled in this follow-up study. Football players who had serious acute or chronic health problems such as diabetes, endocrine disorders, cardiovascular disease, systemic infections, musculoskeletal disorders, or concentration problems

physiological disorders such as depression, or post-traumatic stress disorders were excluded from this study. Based upon the type of sport injury, the players classified into two groups; mild injury (n=21) and moderate injury (n=21). At a statistical power of 96% and a significance level of ≤ 0.05 , the sample size of the study was estimated to be 42 participants to compensate for an estimated 12 % dropout rate. The study was approved by the Research Ethics Committee of King Saud University, and all participants gave signed informed consent

Demographics and baseline socioeconomic status, and psychological indicators of all participants were shown in table 1.

Table (1). Baseline demographic characteristics of football players (n=42).

Variables	Sport injury score		P-value
	Mild (n=21)	Moderate (n=21)	
Age (years)	21.5±2.4	21.7±2.6	0.15
BMI	18.5±1.6	20.6±1.86	0.18
WHR	0.78±0.1	0.92±0.65	0.05
<i>Social support indicators</i>	14.6±3.6	15.6±3.6	0.001
Family	16.23±1.7	19.4±6.3	
Friends	17.3±2.5	23.1±5.1	
Self-satisfaction	46.1±4.6	60.1±3.7	
Total score			
<i>Psychological measures</i>	9.4±1.5	6.54±3.6	0.001
Self confidence	5.23±2.4	3.77±1.5	
Social interaction	7.66±2.6	4.77±4.1	
Emotional	4.37±1.2	4.62±4.6	
Control	9.71±2.6	6.04±3.9	
Energy utilization	5.47±3.1	8.9±1.5	
Psychological prevention	10.82±2.9	6.2±4.3	
Humanity	52.65±4.6	40.84±2.8	
Self-acceptance			
Total score			

Organization and description of sport injuries of the participants

The following two injury mechanisms were considered: i) injury due to direct contact caused by a single traumatic incident, such as a fall or collision with an opponent[23-25]; ii) non-contact injuries stemming from aspects inherent to the sport itself, such as short and long-distance runs, rapid changes in movement, jumps, and landing.[23-25] Accordingly, the severity of injuries were categorized as mild injury (1 to 7 days away from sport), moderate injury (8 to 21 days away from sport) or severe injury (more than 21 days away from sport or permanent injury).[26-28] In case of our football players, the participants divided into to groups; mild injury (n=21; 1 to 7 days away from sport), moderate injury (n=21; 8 to 21 days away from sport).

Assessments of social and psychological support measures:

A prevalidated questionnaires were applied to evaluate the degree of social and psychological support measures among football players. These measures were evaluated according to previously performed questionnaires and that test-retest reliability coefficients of 0.80 or higher for these statistics are indicative of acceptable test-retest reliability. [29-30]

Statistical Analysis

An SPSS software (Statistical Package for the Social Sciences, version 18.0, SPSS Inc. Chicago, IL, USA) was used to perform statistical analyses. The qualitative variables were presented in terms of frequencies and percentage, and the quantitative variables were presented using mean and standard deviation. For analyses within the groups, we used a t- test for paired data. The unpaired t- test was used for within and between groups. The comparison and correlation of the studied parameters were investigated using both Student's t-test and Pearson's correlation coefficient, respectively. Values at $p < 0.05$ were considered statistically significant.

Results

In this study, correlation between social and psychological support, and the degree of sport injury were significantly characterized in 42 healthy football players. Based on the degree of the severity of sport injuries, the participants classified into to groups; mild ($n=21$) and moderate ($n=21$) as shown in table (1). There is no significant difference in age, BMI, but WHR of adiposity showed little significant change in player with moderate sport injury compared with those of mild scores (table 1). The results showed that plyers with moderate sport injury require more social support as shown in the increase in the scores of families, friends, self-satisfaction support ($p=0.001$). These data supported by significant decrease in the scores of psychological measures obtained in players with moderate sport injury compared to mild ones ($P=0.001$) (table 1).

Values are expressed as mean \pm SD; the unpaired t- test was used for within and between groups. Values at $p < 0.05$ were considered statistically significant; BMI: body mass index; WHR: waist to hip ratio

Figure 1: changes in social and psychological outcome measures in relation to the degree of sport injury among football players aged 20-28 years old ($n=42$). Significant higher changes in the scores of family, friends, and self-satisfaction supports among players with moderate sport injury status compared to those present in players with mild scores of injuries [A]. In addition, lower levels of psychological measures were significantly associated with severe sport injuries as in players with moderate scores compared to that present in players with no or mild scores. The data support or proved that both social and psychological outcome measures are essential for butter healthy football players and reduce the time to return to normal activities.

In addition, changes in social and psychological outcome measures in relation to the degree of postinjury were significantly appreciated (figure 1). Significant

higher changes in the scores of family, friends, and self-satisfaction supports were reported among players with moderate sport injury status compared to those present in players with mild scores of injuries [A]. In addition, lower levels of psychological measures were significantly associated with severe sport injuries as in players with moderate scores compared to that present in playwriting or mild scores (table 2). The data support or proved that both social and psychological outcome measures are essential for butter healthy football players and reduce the time to return to normal activities.

Table (2). Correlation between sport injury scores and social support and psychological outcome measures among football players ($n=42$).

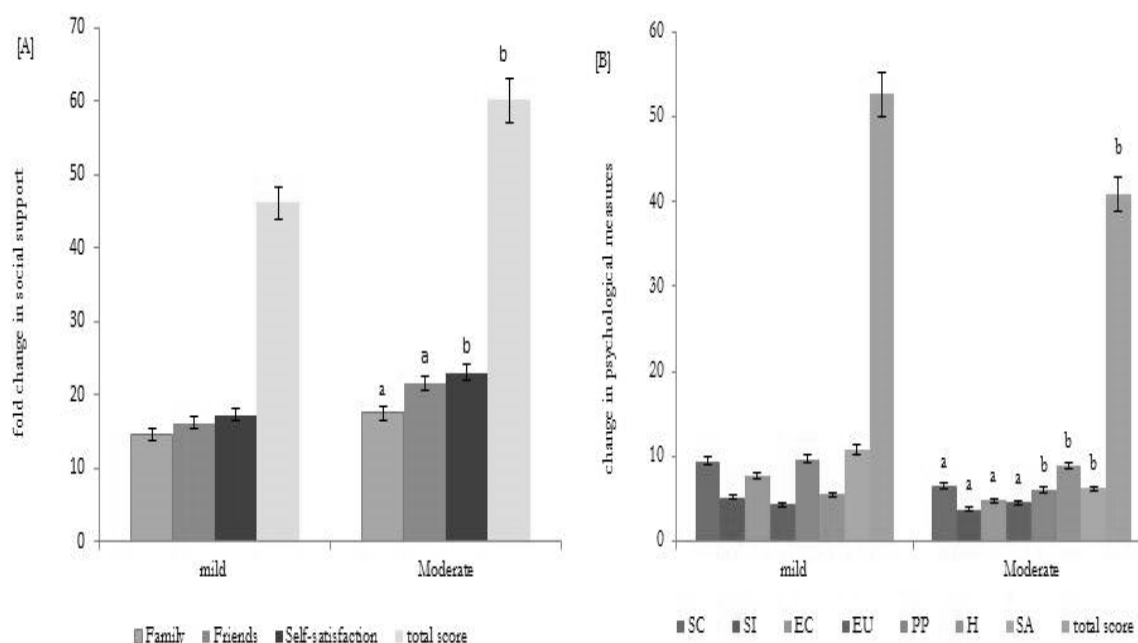
Social psychological measures and	Sport injury score			
	Mild ($n=21$)		Moderate ($n=21$)	
	R	P	R	P
<i>Social support indicators</i>				
Family	0.123	0.001	0.25	0.001
Friends	0.471	0.005	0.135	0.001
Self-satisfaction	0.275	0.004	0.367	0.001
Total score	0.321	0.001	0.145	0.001
<i>Psychological measures</i>				
Self confidence	0.236	0.001	0.361	0.012
Social interaction	0.125	0.001	0.285	0.003
Emotional Control	0.258	0.001	0.214	0.001
Energy utilization	0.369	0.001	0.125	0.005
Psychological prevention	0.148	0.001	0.321	0.001
Humanity	0.235	0.001	0.421	0.001
Self-acceptance	0.524	0.001	0.358	0.002
Total score	0.325	0.002	0.428	0.003

Discussion

In this study, the correlation between social and psychological support, and the degree of sports injury were significantly characterized in 42 healthy football players. Football players with moderate sports injuries significantly showed more social support along with lower scores of psychological parameters in comparison with the players with no or mild sports injury.

Previous research reports showed that players need more than physical ability to perform efficiently the sport competitions (29-32). Football players require to both social and psychological support to be physically active during matches, particularly in sports competitions. Some reports suggested that social consequences along with the psychological status of players significantly affects upon mental stages of players especially during sports injuries (31-34). Thus, the real challenge facing the athletes today is the need to prepare a good psychological mind, in order to excel mathematically performance (33).

Also, some studies showed that most players are exposed to some psychological events during training and competition because of their nature. This may be due to social and demographic changes, and sports injuries during matches or training sessions. These collectively influences on psychological, efficiency, achievements of football players, especially when they decide to return to normal activities following sports injuries (35-38).



In this study, changes in social and psychological outcome measures in relation to the degree of postinjury were significantly appreciated. Significant higher changes in the scores of family, friends, and self-satisfaction supports were reported among players with moderate sport injury status compared to those with mild scores. In addition, lower levels of psychological measures were significantly associated with severe sport injuries as in players with moderate scores compared to that present in players with no or mild scores.

Previous research reports provide growing interest in the psychological and social aspects especially among players who want to return to sport following serious injury (39-41). Whereas, physical and psychological readiness have recognized for returning back to sport after injury (42-44). In addition, pressures to return to sport (45-47), as well declines in confidence and performance as measures of social and psychological parameters (48-51) have also been suggested. Also, personal goals, self-efficacy, and self-satisfaction were shown to play a significant role on injury rehabilitation among injured athletes (47), and that coping and social support among injured athletes were of much interest during injury rehabilitation (48-53).

In conclusion

the data support or proved that both social and psychological outcome measures are essential for better healthy football players and reduce the time to return to normal activities. In addition, personal goals, self-efficacy, and self-satisfaction along with social support were shown to play a significant role on injury rehabilitation among injured athletes.

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Disclosure

The authors report no conflicts of interest in this work.

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