

Development and Validation of the Football Stressor Inventory

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Introduction

Professional athletes are particularly vulnerable to experiencing high levels of chronic stress (Messner, 1992) and strategies need to be developed to prevent or reduce the stress they experience. However much of the stress-in-sport research has involved youth, collegiate or amateur-level athletes and little is known about the sources of stress experienced by athletes at the professional level. Intuitively there would be a number of stressful situations encountered by professional footballers, basketballers or other full-time athletes that are not represented in the previous studies involving collegiate or amateur athletes. Player transfers, contract disputes, and fear of job loss are just some of the stressors that are likely to be experienced by professional athletes that would be rarely faced by athletes participating in non-professional competitions. One possible explanation why stress among professional athletes is understudied is the lack of a psychometrically sound instrument to measure the sources of stress experienced by this group. The aim of the present study was therefore to develop and evaluate an inventory that could be used to measure the situations and conditions that lead to stress among professional footballers. The inventory is referred to as the Football Stressor Inventory (FSI).

Methods

Participants in this study were drawn from two codes of professional football. The first sample consisted of 255 players from the Australian Football League (AFL), while the second comprised 140 players participating in the National Soccer League (NSL). The FSI consisted of 25 stressors that were based on a qualitative study involving professional Australian footballers (Noblet & Gifford, 2002). Copies of the FSI questionnaire were handed directly to participants during meetings organised by player representatives and participants were required to indicate the extent to which each of the conditions or situations listed on the FSI was a source of stress in their job as a footballer. Questions were answered on a five-point Likert scale ranging from 1="not at all" to 5="major source of stress". Two Principal Components Analyses (PCA) were conducted, firstly on the data from the AFL footballers and then on the data from the NSL footballers.

Results

The results of the PCA involving the AFL data revealed a one component solution where all items, except "after football uncertainty", loaded $> .32$ (10% variance) on this component. This item "after football uncertainty" was removed and the factor analysis re-runs to confirm the one component. This component had an eigenvalue of 7.12 and explained 28.68% of variance. The internal reliability of these 24 items using Cronbach alpha was high ($\alpha = .89$). A second PCA was conducted on the data from the NSL players and a one-component solution was also extracted. All items, including "after football uncertainty" loaded $> .32$ (10% variance). As the post-football uncertainty item had the lowest component weight (.36) and, on further inspection, seemed to be different in character to the other items, it was also removed in this data set. The factor analysis was re-run to confirm one component with an eigenvalue of 9.34 that explained 38.94% of variance. The internal reliability of these 24 items using Cronbach alpha was strong ($\alpha = .93$).

Discussion

The two PCA's revealed a unifactorial structure that was constant across both football codes. The items that loaded highest for players in both leagues were those relating to the treatment of players (i.e., unfair treatment, criticism from coach, and conflict with coaching staff) and the level of support provided by coaching staff (i.e., lack of support during form slumps, feeling left out when injured, and lack of feedback). While not a statistically separate component, the items that weighed less on the component were those relating to more indirect, contextual issues. These issues included concerns over accommodation, salary, and media attention, and related more to the organisational and social context in which professional athletes perform, and as such they are not as closely linked to the primary task of a professional footballer. The inter-code versatility of the FSI raises the possibility that the inventory could be used to assess the stressors experienced by athletes participating in other levels of competition or other sports, both team and single-actor. Although the FSI was designed specifically for professional footballers, parallels with research involving non-professional, non-team sports such as high-school golf, elite figure skating and Olympic-level athletics indicate that many of the issues represented in the FSI could have broader relevance

References

- Messner, M. (1992). *Power at Play: Sports and the Problem of Masculinity*. Boston: Beacon Press.
- Noblet, A., & Gifford, S. (2002). The Sources of Stress Experienced by Professional Australian Footballers. *Journal of Applied Sports Psychology*, 14(1), 1-13.