Original Article

Coping strategies among Brazilian professional and amateur football players

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Published online: December 25, 2012

(Accepted for publication November 15, 2012)

DOI:10.7752/jpes.2012.04061;

Abstract:

To identify coping strategies used among professional and amateur Brazilian football players. The Ways of Coping Scale (WOCS) was completed by 134 male football players (71 professionals: mean age = 22.77 ± 3.98 years; 63 amateurs: mean age = 17.18 ± 0.84 years) from three teams that participated in the Campeonatos Estaduais da Primeira Divisão (the state championships for the first division of football). There was no significant difference between the two groups in the type of coping strategy they used (e.g., problem-focused, emotion-focused, fantasy thoughts, religious practices and social support). Problem-focused coping was the most frequently used strategy by all of the players and social support was the least frequently used strategy. Both professional and amateur players failed to focus on the development of adequate coping strategies. Further studies are needed to better understand the impact that Brazilian athletes experience has on their choice of coping strategies during pre-competitive and competitive phases of their sport.

Key words: Psychological adaptation; football; professional; amateur.

Introduction

Professional athletes must continually seek physical, technical, tactical and psychological excellence. They must also avoid or effectively manage problems that might delay or interrupt their professional lives. The stress associated with sporting competitions is an important topic that is related to the performance of professional athletes, the rigors of training and the demands of the competitive contexts (Hanton, Thomas and Mellalieu, 2008).

Researchers have explored the impact of stress on various types of negative performance outcomes, including performance and reasoning rigidity, reduction of complex analysis skills, inadequate manipulation of information, difficulty completing tasks and inaccuracy. In addition to the effects of stress at an individual level, stress may also negatively affect individuals' functioning in group activities, resulting in poorer quality communication and inaccurate decision-making (Kavanagh, 2005). Furthermore, prolonged exposure to certain stressors may have serious negative professional consequences, such as professional exhaustion.

Coping is an individual adaptive response to difficult situations. Lifestyle changes and problems that are related to the experience of negative emotions (e.g., anxiety or depression) require a response that is composed of a new set of behaviors. This new set of behaviors includes the coping strategies an individual uses to manage the new demands he or she faces. Research has identified several effective coping resources to manage stress, reduce pain and improve health. These resources include optimism, perception of control, self-esteem and social support (Taylor and Stanton, 2007).

The coping strategies used by athletes vary depending on the individual athlete's perception of stress (Anshel and Si, 2008). Within the context of professional sports, the individual's perception of stress varies according to what is "on the line" (e.g., status, title), the individual's beliefs regarding his or her *ranking* in a championship and the individual's resources (e.g., preparation, physical form) (Thatcher and Day, 2008). The goal of this study was to identify the types of coping strategies and the frequency of their use by professional and amateur football players.

Method

Participants

The participants in this study were 134 male football players (71 professionals: mean age = 22.77 ± 3.98 years; 63 amateurs: mean age = 17.18 ± 0.84 years) from three teams that participate in the State of São Paulo Championship Series A-1 and A-2 (professional league) and the São Paulo Junior Football Cup (amateur league), organized by the Paulista Federation of Football, São Paulo State, Brazil. Each of the players completed the Ways of Coping Scale (WOCS).

Procedures

This project was approved by the Ethics Committee of Research at the College of Medicine in São José do Rio Preto - FAMERP - protocol 6109/2006. The individuals who are responsible for the football clubs also approved of this study, after receiving detailed information about the project.

The data was collected during the pre-competitive phase of the State of São Paulo Championship Series A-1 and A-2 (professional league) and the São Paulo Junior Football Cup (amateur league). The athletes were provided with information about the study and invited to participate.

Those who agreed to participate signed an informed consent form. The athletes were individually evaluated for eligibility and those who met the criteria for participation in the study were interviewed and asked to complete the WOCS questionnaire at their training site before or after their training session, particularly while they were in their pre-competitive stage of training.

We used a demographic evaluation form with open- and close-ended questions to collect data on a number of variables: age, years as a registered athlete (i.e., amateur), years as a professional athlete and playing position.

Instruments

To evaluate the athletes' coping strategies, we used the WOCS, developed by Seidl, Tróccoli and Zannon (2001) from the version translated in Portuguese (Gimenes and Queiroz, 1997). The scale consists of 45 items grouped into four factors: 1) problem-focused coping (18 items); 2) emotion-focused coping (15 items); 3) use of religious practices (7 items); 4) social support (5 items). The responses are provided on a Likert scale with scores varying from "1" (never) to "5" (always). Factorial analyses of the WOCS have provided support for the validity of its use to study coping with stress in both research and intervention contexts (Seidl et al., 2001; Vitaliano, Russo, Carr, Maiuro and Becker, 1985). The evaluation of the WOCS was performed according to a protocol provided by its authors (Seidl et al., 2001).

Data Analysis

We conducted descriptive analyses (i.e., mean, median, standard deviation, minimum, maximum, and quartiles) and tests of parametric significance to compare the coping strategies used by the two groups: amateur and professional players. Student's *t* test was used to compare the means of the independent samples and the average test. For all statistical tests, we used a significance level of $p = 0.05$ (Zar, 1999).

Results

The data for the variables of age, years in the profession (i.e., professional athlete) and years as an amateur athlete are presented in Table 1. The age of the amateur players ranged from 15 to 18 years old, and the professional players were between 16- and 34-years-of-age. Athletes were considered to be professional players once they entered into a contractual relationship with a team. Among the players, the amateur athletes had been at their current status for three to nine years and the professional athletes had played at their current level for four to fourteen years. By including both amateur and professional athletes in our sample, we were able to explore the differences in behavior between the two player categories.

Table 1: Age of the Participants and Amount of Time Spent as a Professional or Amateur^a Athlete

Variable	Category	n	$\bar{x} \pm s$	Median	Min	Max
Age	Amateur	62	17.18 ± 0.84	17	15	18
	Professional	69	22.77 ± 3.98	23	16	34
Time	Amateur	60	3.32 ± 2.05	3	1	9
	Professional	67	5.12 ± 3.61	4	1	14

^aTwo amateur players did not provide the amount of time they had played at the amateur level.

Table 2 presents the results of the statistical analyses for the coping strategies used most frequently by the participants (i.e., Factor 1: Problem-focused coping strategies; Factor 2: Emotion-focused coping strategies;

Factor 3: Religious practices/Fantasy thoughts; Factor 4: Search for social support). The p values indicate the level of statistical significance for the between-groups t test results. These comparisons were made for each factor separately.

Table 2: Descriptive Statistics for Player Category and Types of Coping Strategies

<i>Variable</i>	<i>Category</i>	<i>n</i>	$\bar{x} \pm s$	<i>Med</i>	<i>Min</i>	<i>Max</i>	<i>P Value</i>
Problem focused	Amateur	63	3.77 $\pm$ 0.50	3.77	2.33	4.72	0.884
	Professional	71	3.78 $\pm$ 0.45	3.77	2.55	4.50	
Emotion	Amateur	63	2.44 $\pm$ 0.53	2.40	1.60	3.73	0.314
	Professional	71	2.35 $\pm$ 0.45	2.35	1.28	3.64	
Religion / fantasy	Amateur	63	3.48 $\pm$ 0.72	3.57	1.85	4.57	0.846
	Professional	71	3.50 $\pm$ 0.56	3.57	1.57	4.57	
Social support	Amateur	63	2.13 $\pm$ 0.83	2.00	-0.20	3.60	0.182
	Professional	71	1.94 $\pm$ 0.76	2.00	0.20	3.40	

As displayed in Table 2, there is no statistically significant difference between any of the median coping strategy values of the professional athletes and those of the amateur athletes. A comparison of the mean coping strategy scores revealed that the most frequently used strategies were problem-focused and religious practices/fantasy thoughts. The social support coping strategy was used the least often by both professional athletes.

As for the effect of age, there is no evidence for an association between the type of coping strategy used and the amount of time spent as a professional or amateur athlete. However, based on the results presented in (Tables 1 and 2), it appears that the most frequently used coping strategies were problem-focused and religious practices/fantasy thoughts, for both the more experienced players (i.e., professionals) and the least experienced (i.e., amateurs).

Discussion

One hypothesis that guided the implementation of this study was that professional players, who were more experienced, would display different patterns of coping than the amateur athletes because the professional players would have had more experience playing in competitions. There are several reasons why we may not have found a difference between the types of coping strategies used by these two groups of players. First, there is a close similarity in the preparation models for both professional and amateur football. Thus, amateur athletes are likely prepared using models similar to those used with professional players. In this case, the teaching and acquisition of coping strategies would be similar for both professionals and amateurs. This hypothesis is supported by the fact that both groups used the same two coping strategies most often: problem-focused and religious practice/fantasy thought coping.

Although there was no significant difference between amateurs and professionals, the results for frequency of use are consistent with previous research on athletes' coping strategies. Problem-focused strategies (e.g., greater effort during practice, obtaining information about the opponents) are the most frequently used strategies to cope with manageable stress. When these strategies are not effective, other strategies, namely emotion-focused strategies, are used; these are effective strategies when the stressor is perceived as being uncontrollable (Holt, 2003; Holt and Dunn, 2004; Bell and Thompson, 2007).

Compared to the other coping strategies, the players tended to rely on social support the least often. This is an important finding because the support of others has been shown to be a significant stress reliever. When players rely on this type of coping strategy, they are seeking an external source to help them cope with their problem. Several studies have demonstrated the positive effects of social support when coping with stressful situations across many different contexts. For example, social support can protect individuals from developing a mental disorder, such as depression (Straub, 2005; Spasojevic and Alloy, 2001; Nicholls and Polman, 2007). As such, social support should be emphasized as an important coping strategy in the training of athletes, as they will inevitably cope with stressors throughout their careers that require external support to manage.

Despite the lack of association between each type of coping strategy and the age of the athletes, athletes who were 18 years of age use a greater variety of coping strategies, evidenced by the greater dispersion of scores for this age group. This finding is not surprising because the literature indicates that athletes become more effective in coping with stress as they age. However, longitudinal studies are still needed to identify how the cognitive, social, emotional and biological factors of the players determine their acquisition of effective coping

strategies in the context of sports. This knowledge would likely aid in the selection of talented athletes, help prevent drop-outs and the increase the athletes' adherence to their training programs (Nicholls and Polman, 2007).

The data indicate that the athletes prioritized the use of problem-focused coping strategies when they were confronted with a stressor. This is a positive finding because this type of strategy is appropriate and effective when there is a possibility of changing the stressor or of acquiring greater skills to manage it (Straub, 2005). However, the emotion-focused strategies were the second most frequently used strategies by both amateur and professional players. This category of coping strategies includes escape-avoidance, distancing and positive reappraisal of the situation. Emotion-focused coping strategies are appropriate when individuals believe they cannot do much to change a stressor. In such cases, individuals may use emotion-focused behavioral strategies (e.g., seek social support, which is a positive strategy, or use alcohol and drugs or distance themselves from teammates, both of which are considered negative strategies) and cognitive strategies (e.g., changing the way they evaluate the stressor or denying unpleasant information) (Straub, 2005; Nicholls and Polman, 2007; Thelwell, Weston and Greenlees, 2007).

Conclusions

Although previous studies have reported that the amount of time an athlete has spent playing in his or her sport is related to the development of more effective coping strategies, the results of this study did not support this finding. This discrepancy may be a result of the different samples studied. In our study, the both the amateur and professional players participated in similar organized training that failed to focus on the development of adequate coping strategies. Further studies are needed to better understand the impact that athletes' playing experience has on their choice of coping strategies during the pre-competitive and competitive phases of their sport.

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