

THE EFFECT OF PRACTICE EXPERIENCE ON ATHLETIC COPING SKILL IN AMATEUR FOOTBALL PLAYERS

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ABSTRACT

Psychological skills are essential for athletes, as they directly influence their performance in dealing with stressors such as fear, pain, lack of confidence, and uncertainties during competitions and training. This study investigates the psychological skills of federated football players and how experience in district competitions can influence these skills. Using a cross-sectional, descriptive, and exploratory research method, this study applied the Athletic Coping Skills Inventory (ACSI-28BR) to 17 football players and subsequently compared the difference in these skills between experienced and inexperienced athlete groups. The results revealed higher scores in "Confidence/Motivation" and "Performance under Pressure", with significant differences in "Goals/Mental Preparation" between beginner and experienced players. Beginner players showed greater ability in "Dealing with Adversities", while experienced players excelled in "Performance under Pressure". The comparison between G1 and G2 across the ACSI-28 subscales showed that while most subscales did not present significant differences ($M = 5.14-8.85$, $t(16) = 0.31-1.28$, $p=0.21-0.75$, $\Delta = -15.26\%$ to 16.89%), a significant difference was observed in "Goals/Mental Preparation" ($M = 5.85-7.63$, $t(16) = 2.28$, $p=0.03$, $\Delta = -23.31\%$). The significant improvement in "Goals/Mental Preparation" highlights a distinct advantage for G1 in that psychological ability. These findings highlight the importance of developing personalized psychological training to enhance coping skills and overall athlete performance.

Key words: Psychological skills. Sport coping. Football players.

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RESUMO

O efeito da experiência prática na habilidade de enfrentamento atlético em jogadores de futebol amadores

As habilidades psicológicas são essenciais para os atletas, pois influenciam diretamente seu desempenho em lidar com estressores como medo, dor, falta de confiança e incertezas durante competições e treinamentos. Este estudo investiga as habilidades psicológicas de jogadores de futebol federados e como a experiência em competições distritais pode influenciar essas habilidades. Usando um método de pesquisa transversal, descritivo e exploratório, este estudo aplicou o Athletic Coping Skills Inventory (ACSI-28BR) a 17 jogadores de futebol e posteriormente comparou a diferença nessas habilidades entre grupos de atletas experientes e inexperientes. Os resultados revelaram pontuações mais altas em "Confiança/Motivação" e "Desempenho sob Pressão", com diferenças significativas em "Objetivos/Preparação Mental" entre jogadores iniciantes e experientes. Jogadores iniciantes mostraram maior habilidade em "Lidar com Adversidades", enquanto jogadores experientes se destacaram em "Desempenho sob Pressão". A comparação entre G1 e G2 nas subescalas do ACSI-28 mostrou que, embora a maioria das subescalas não tenha apresentado diferenças significativas ($M=5,14-8,85$, $t(16)=0,31-1,28$, $p=0,21-0,75$, $\Delta=-15,26\%$ a $16,89\%$), uma diferença significativa foi observada em "Objetivos/Preparação Mental" ($M=5,85-7,63$, $t(16)=2,28$, $p=0,03$, $\Delta=23,31\%$). A melhora em Objetivos/Preparação Mental destaca uma vantagem distinta para G1 nessa habilidade psicológica. Essas descobertas destacam a importância de desenvolver treinamento psicológico personalizado para aprimorar as habilidades de enfrentamento e o desempenho geral do atleta.

Palavras-chave: Habilidades psicológicas. Enfrentamento esportivo. Jogadores de futebol.

INTRODUCTION

The demands and challenges faced daily, known as stressors, trigger the release of stress hormones, especially cortisol, considered one of the main substances in the human body and often associated as an indicator of this state, which can be used to evaluate the stress response (Harris et al., 2007).

This response not only influences physiological functions, but may also impact emotional, mental, and physical reactions (Sahlin et al., 2014).

During competitions and training, athletes face a variety of stresses, including fear, pain, lack of confidence, and uncertainty, and the inability to deal properly with these stress factors can result in a reduction in athletic performance (Lazarus, Folkman, 1987). Indeed, Lazarus and Folkman demonstrate the relevance of sports psychology literature and emphasize the importance of athletes developing and employing adaptive coping strategies to face such challenges. In this sense, coping consists of a collection of behaviors and cognitive efforts individuals employ to face specific situations that arise in moments of stress.

One of the most widely used instruments to evaluate such strategies is the Athletic Coping Strategies Inventory (ACSI-28), devised by Smith and his colleagues (Smith et al., 1995), and validated for the Portuguese language (2011) (Miranda et al., 2018).

This instrument comprises 28 items answered on a four-point Likert scale, ranging from 0 (rarely) to 3 (almost always), encompassing a variety of specific psychological skills related to the sports context.

Thus, a study conducted with Taekwondo athletes, using the ACSI-28, revealed a significantly positive association, suggesting that an increase in athletes' coping ability is associated with their results during Taekwondo fights (Putranto, Kristiyanto, Purnama, 2019).

In another study conducted with university baseball athletes, it was verified that the use of ACSI-28 could contribute to supporting strategic decisions and offer valuable insights, both for team management and for the athletes themselves.

Furthermore, understanding these adaptation skills (e.g. coping) could improve their performance during competitions (Kimbrough, DeBolt, Balkin, 2024).

Similarly, anxiety, stress, and coping skills can influence the performance of professional basketball athletes in pre-competitive phases (Teixeira et al., 2022).

In a recent study, conducted with the ACSI-25BR, an adaptation of the ACSI-28 for the Portuguese language in Brazil, an association was observed between anxiety, coping skills, athletic performance, and the risk of injuries during basketball activity (Clemente et al., 2019).

In another study, anxiety and coping skills were explored in CrossFit athletes, highlighting differences in coping skills based on gender and their effects on performance and risk of injury.

In this sense, interventions aimed at improving such skills are considered of paramount importance for better performance of the CrossFit athlete, as well as to prevent and reduce the risk of injury, which is considerably high in this sport (Wilke et al., 2020).

A study conducted in the United States, involving a women's team from the first division of basketball, showed that short-term intervention programs with psychological support resulted in improvements in the coping skills of the athletes.

The importance of coping strategies in sports performance has been widely studied, especially in sports with high psychological demands, such as football.

Research with futsal players, using the Athletic Coping Skills Inventory-28 (ACSI-28) questionnaire, indicated that players called up for the Brazilian national team use coping strategies more frequently compared to those who were not called up, suggesting a link between the level of competitiveness and the adoption of effective psychological mechanisms (Bim et al., 2014).

Another study focused on youth football, using ACSI-28, showed that goalkeepers and defenders experience higher stress, highlighting the influence of playing position on the use of coping strategies (Nascimento Junior et al., 2010).

Furthermore, an analysis comparing professional and amateur football players revealed that motivational factors directly

impact the choice of coping strategies in competitive stress situations (Oliveira, 2009).

In another study with female football players, the application of ACSI-28 highlighted that high-performance players perform better in dimensions such as concentration and confidence compared to amateur players, reinforcing the relevance of these skills for success in sports (Oliveira et al., 2016).

Finally, research with professional football players showed that they use emotional strategies more frequently, contributing to emotional stability during competitions (Rossi et al., 2016).

These findings emphasize the diversity of factors that influence the use of coping strategies in football, varying according to the athletes' level of experience, playing position, gender, and competitive context (Teixeira et al., 2021; Teixeira et al., 2023).

This study hypothesizes that athletes with more experience are more effective in managing different psychological skills compared to less experienced athletes.

The present study aims to identify the psychological skills of federated football players and analyze the effect of players' experience in the district championship based on two distinct groups: beginners and experienced.

MATERIALS AND METHODS

Participants

This study is characterized by having a cross-sectional, descriptive, and exploratory design. To participate in the study, the participant had to meet the following criteria: age equal to or greater than 18 years and be duly registered in the district championship honor division.

Seventeen male footballers participated in this study. In the season under review (23/24), 25 footballers were registered in this competition. The sample corresponded to 68% of footballers from the African Students' Association of Bragança who attended training sessions at the Synthetic Turf Field of the Polytechnic Institute of Bragança (IPB), Portugal.

Instruments

To evaluate the psychological abilities of football players based on their experience, the Athletic Coping Skill Inventory (ACSI-28), the translated and validated version for the Portuguese language spoken in Brazil called the Athletic Coping Skill Inventory (ACSI-28BR) was used (Kruger et al., 2019).

This instrument has 28 items distributed across seven subscales. The subscales of the ACSI-28BR are: Dealing with Adversities, Performance under Pressure, Goals/Mental Preparation, Concentration, Worry-Free, Confidence/Motivation, and Trainability.

The responses are given on a Likert-type scale (0= rarely to 3= almost always). Additionally, the football players were asked to answer two questions about two specific sociodemographic variables (e.g., age; newcomer or not in the district championship).

Procedures

To collect the data, the football players filled out a questionnaire, in person and during training hours.

The participants were divided into two groups based on their level of experience: novice athletes and experienced athletes. To determine the classification of each athlete, a specific question was included in the questionnaire. The question asked whether the athlete was newcomer or not in the district championship.

Athletes who answered affirmatively were classified as novices, while those who indicated they had been on the team for more than one year were classified as experienced. This approach allowed for a clear and objective distinction between the levels of experience, ensuring that the variable was consistently considered during subsequent analyses.

Additionally, the football players filled out a form where they declared their voluntary participation in the respective study, also being informed that anonymity would be guaranteed.

The questionnaire was administered in different locations, such as the Municipal Pavilion of Nogueira and at the training unit of the Polytechnic Institute of Bragança (IPB), in a room designated for football players, in the month of April 2024.

The average time required to complete the questionnaire was 6 minutes.

Statistical analysis

The statistical analysis included the descriptive evaluation of age and the dichotomy of footballers' experience, along with the measurement of psychological abilities through the ACSI-28.

Furthermore, the student's t-test for independent samples was applied to compare possible differences between groups about psychological abilities, maintaining a significance level of $p < 0.05$. The effect sizes were calculated by Cohen's d and classified as:

0.2, trivial; 0.6, small; 1.2, large; and > 2.0 , very large (Hopkins et al., 2009). The statistical analysis was conducted using the JASP program version 0.18.3.

RESULTS

Eighteen male football players participated in this study, 7 (39%) had already played in the district championship and 11 (61%) had never played in the district championship, with ages ranging from 19 to 31 years ($M = 24.05$; $SD = 1.45$). Regarding the averages and scores of the various items of the ACSI, we found different average values for each item (Table 1).

Table 1 - Means, the standard deviation of the sub-scales of the ACSI-28 is a table.

	Min.	Max.	M	SD
Dealing with Adversity	3	12	7.61	2.59
Performance under Pressure	5	12	7.94	2.07
Goals/Mental Preparation	3	10	6.94	1.79
Concentration	3	12	6.77	2.18
Worry-Free	1	11	5.61	2.76
Confidence/Motivation	5	12	8.66	1.97
Trainability	4	9	5.38	1.46

Min: Minimum; Max: Maximum; M: Average; SD: Standard Deviation.

It was found that the highest scores were obtained for "Confidence/Motivation" ($M = 8.66$; $SD = 1.97$), followed by "Performance under Pressure" ($M = 7.94$; $SD = 2.07$). The

lowest scores were obtained for "Trainability" ($M = 5.38$; $SD = 1.46$) followed by worry-free ($M = 5.61$; $SD = 2.76$).

Table 2 - Mean and standard deviation as a function of experience.

Experience	Novice experience (n=11)		Experienced (n=7)	
	M	SD	M	SD
Dealing with Adversity	8.09	2.77	6.85	2.26
Performance under Pressure	7.45	2.20	8.71	1.70
Goals/Mental Preparation	7.63	1.56	5.87	1.67
Concentration	7.00	2.23	6.42	2.22
Worry-Free	5.90	2.91	5.14	2.67
Confidence/Motivation	8.54	1.86	8.85	2.26
Trainability	5.54	1.57	5.14	1.34

M: Mean; SD: Standard Deviation; n = Number of Individuals.

The analysis of psychological skills based on the field football players' experience revealed significant insights into their individual abilities to face challenges and deal with pressures associated with sports practice. The highest average observed for the "Confidence/Motivation" subscale was ($M = 8.54$; $SD = 1.86$). While the lowest average was observed for the "Trainability" subscale ($M = 5.54$; $SD = 1.57$). Furthermore, when analyzing the group of football players who already have experience in the district competition, we observe

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similar results, but with some significant distinctions. Despite the differences in the averages of the subscales between the groups, both share similar values in terms of psychological abilities. Experienced footballers showed a lower average score in the

"Trainability" subscale ($M = 5.14$; $SD = 1.34$), along with "Worry-Free" ($M = 5.14$; $SD = 2.67$). Regarding the comparisons of means between experienced and inexperienced groups (Table 3).

Table 3 - Student's T-test.

	t	p	DF	d	Δ (%)
Dealing with Adversity	0.98	0.34	16	0.47	-15.26
Performance under Pressure	-1.28	0.21	16	-0.62	16.89
Goals/Mental Preparation	2.28	0.03*	16	1.10	-23.31
Concentration	0.52	0.60	16	0.25	-8.16
Worry-Free	0.56	0.58	16	0.27	-12.98
Confidence/Motivation	-0.31	0.75	16	-0.15	3.65
Trainability	0.55	0.58	16	0.27	-7.24

G1: Novice Experience; G2: Experienced; M: Mean; SD: Standard Deviation; DF: Degrees Freedom; d: Cohen's d; Δ : Mean difference; * for $p < 0.05$ *Student's t-test.

With the results, available in Table 3, it is possible to verify, group G1 ($M = 8.09 \pm 2.77$) showed a mean not significantly different from group G2 ($M = 6.85 \pm 2.26$), $t(16) = 0.98$, $p = 0.34$, $d = 0.47$, $\Delta = -15.26\%$, in the "Dealing with Adversity" subscale, group G1 ($M = 7.45 \pm 2.20$) presented a mean not significantly different from group G2 ($M = 8.71 \pm 1.70$), $t(16) = -1.28$, $p = 0.21$, $d = -0.62$, $\Delta = 16.89\%$, in the "Performance under Pressure" subscale, the G1 group ($M = 7.63 \pm 1.56$) presented a significantly higher average than the G2 group ($M = 5.85 \pm 1.67$), $t(16) = 2.28$, $p = 0.03^*$, $d = 1.10$, $\Delta = -23.31\%$, in the "Goals/Mental Preparation" subscale among the groups in different psychological abilities of the ACSI-28. In the "Concentration" subscale we observe, G1 group ($M = 7.00 \pm 2.22$) presented a non-significantly different average than the G2 group ($M = 6.42 \pm 2.22$), $t(16) = 0.52$, $p = 0.60$, $d = 0.25$, $\Delta = -8.16\%$, for "Worry-Free" we observe, G1 group ($M = 5.90 \pm 2.91$) presented a non-significantly different average than the G2 group ($M = 5.14 \pm 2.67$), $t(16) = 0.56$, $p = 0.58$, $d = 0.27$, $\Delta = -12.98\%$, for "Confidence/Motivation" we observe the G1 group ($M = 8.54 \pm 1.86$) showed a mean not significantly different from the G2 group ($M = 8.85 \pm 2.26$), $t(16) = -0.31$, $p = 0.75$, $d = -0.15$, $\Delta = 3.65\%$, finally in the "Trainability" subscale we observe G1 group ($M = 5.54 \pm 1.57$) showed a mean not significantly different from the G2 group ($M = 5.14 \pm 1.34$), $t(16) = 0.55$, $p = 0.58$, $d = 0.27$, $\Delta = -7.24\%$.

DISCUSSION

The objective of this study was to identify the psychological abilities of federated football players and analyze the effect of players' experience in the district championship according to two distinct groups, concretely the novice experienced s and the experienced football players.

According to some scholars, the ability to apply coping strategies has a direct impact on how potentially stressful situations are assimilated. It is worth noting that the more strategies an individual develops, the lower the sense of instability in the face of these situations (Nascimento Junior et al., 2010; Pensgaard, Duda, 2003).

When analyzing the averages of the subscales of the ACSI-28, we observed the unique psychological characteristics of each group. Indicating that the footballers showed strong self-confidence and motivation to face challenges during their first participation in the district competition.

The high average observed in "Confidence/Motivation" in both groups points to the natural ability of these football players to effectively deal with the specific pressures of the competitive environment of the district competition.

This result is in line with the concept of confidence/motivation, which relates to the athlete's ability to believe in their potential and stay positive, even when faced with adversity

(Coimbra et al., 2013; Miranda et al., 2018; Smith, Christensen, 1995).

This self-confidence, combined with motivation, allows athletes not only to face challenges effectively, but also to feel encouraged to continually improve (Coimbra et al., 2013).

In the group made up of football players without previous experience in the district league, we observed higher averages in several subscales, especially in "Dealing with Adversity".

This may suggest that these football players have a greater ability to face challenges, despite the lack of previous experience in the competition. Although for Coimbra et al., (2013). The main difference between athletes of different competitive levels lies in the quantity and quality of the competitions they face. This indicates that the experience accumulated by athletes is essential, as it allows them to use more appropriate and effective strategies to deal with challenges.

This reasoning is consistent with that of Ryan-Wenger (1992), who suggests that coping is improved through a continuous learning process, the more prepared the athlete is, the better their performance will be in disturbing situations.

The lowest averages found in both groups correspond to the areas of "Trainability" and 'Worry-free' and may indicate a greater need for a training program aimed at improving these skills among football players. The athletes with more years of registration showed less concern about mistakes and the possibility of not training or playing well and were also the ones who reacted best to performance pressure (Pires et a., 2019).

Regarding the differences between the groups, in our analysis, we found significant differences in "Goals/Mental Preparation". This result suggests that footballers without previous experience tend to set goals and mentally prepare better for the challenges of competition, compared to experienced footballers.

However, it is important to recognize that these differences may be influenced by a variety of factors, including the individual personality of the players and the training strategies adopted (Géczi et al., 2008; Smith et a., 1995).

In a study conducted with 54 professional athletes who participated in the State Championship of Pará, it was concluded that adequate goal setting and planning, combined with confidence and motivation during training and competitions, can reduce physical and emotional fatigue, as well as the feeling of failure in sports (Pires et a., 2019).

By recognizing the differences in psychological abilities among groups, coaches and mental health professionals can adapt their training and support approaches to meet the specific needs of each group (Clemente et al., 2019).

In addition to the highlighted differences between groups with and without experience in district competition, it is important to consider other aspects that may influence the psychological skills of football players. One factor to be considered is the role of the training environment and sports culture within each team. The club culture, the coaches' expectations, and the group dynamics can play a significant role in the development of football players' psychological skills (Kimbrough, DeBolt, Balkin, 2024).

It is possible to observe that the aspects with lower scores are "Worry-Free" and "Trainability" in both groups, which may indicate a difficulty in maintaining mental tranquility during sports practice and a lower capacity for adaptation and learning in the face of training challenges, being one of the areas with potential for intervention and differentiated psychological development within the team (Lehnen, Rodrigues, Marques, 2006).

Furthermore, footballers without experience in the district championship showed higher levels in areas such as "Confidence/Motivation" and "Dealing with Adversity", despite the lack of previous experience in the competition. On the other hand, experienced footballers exhibited a higher average in "Performance under Pressure", indicating superior ability in dealing with the specific pressures of the competitive environment. It is observed that the use of coping strategies is crucial for the development and performance of the athlete, possibly due to the individual's self-perception in stressful situations.

According to Pensgaard and Duda (2003), the ability to apply appropriate coping strategies affects how situations are perceived,

whether threatening or not. The more diverse and frequent the strategies used, the less the feeling of danger or fear in stressful situations.

Therefore, it is essential that the repertoire of coping strategies be varied, allowing the football athlete to face and overcome different stress factors, which contributes to a more consistent performance and success throughout their sports career (Bim et al., 2014).

Considering the limitations of the study, such as the homogeneity of the sample, and the fact that it is a cross-sectional study and involves only a single football team, it is important to continue investigating the psychological skills of football players to promote better sports performance.

These results represent clues for coaches and health and sports professionals, assisting them in formulating personalized training strategies for each group of football players (Ferraz et al., 2022; Forte et al., 2024).

The instruments used in this study may have the potential to inform the development of psychological programs and increase football players' awareness of areas that require a more critical look that results in the implementation of specific strategies to deal with these psychological skills.

CONCLUSIONS

This study explored the psychological skills of federated football players about their experience in district competitions. By using the Athletic Coping Strategies Inventory (ACSI-28), it was observed that both groups, both novice and experienced football players, share similar values in terms of psychological skills.

Although differences were identified in the means of the subscales between the groups, the construction "Goals/Mental Preparation" showed significant differences ($p < 0.05$). Emphasizing the importance of mental preparation and goal setting as influential components for facing challenges during games and even throughout the season.

Ethics Approval

The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board

of the Higher Institute of Educational Sciences of the Douro (nº: 6.31142).

Ethics Statement

Informed consent to participate in this study was obtained from all subjects and/or their legal guardians prior to participation.

Consent for Publication

All authors confirm that they have read, reviewed and approved of the final version of the manuscript, agreeing to its submission for publication.

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Recebido para publicação em 10/01/2025

Aceito em 22/01/2025