

Coping with stress and health behaviors in collegiate athletes training in team sports

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Abstract

Background and Study Aim Coping with stress may influence decisions regarding engagement in health-related behaviors. This, in turn, can affect the well-being and overall functioning of students. Therefore, the aim of the present study was to examine the relationships between stress coping styles and health behaviors among collegiate-level male and female athletes training in team sports.

Material and Methods The study included 99 students of both sexes, aged between 21 and 27 years, who reported a training history ranging from 4 to 20 years. The participants practiced sports including football, basketball, and volleyball. The research instruments used were the Polish adaptation of the Coping Inventory for Stressful Situations (CISS) and Juczyński's Health Behavior Inventory. Statistical analyses were conducted using Statistica v. 13.3.

Results The results indicate differences in the frequency of using stress coping styles and health behaviors between female and male participants. There were also associations between the variables: task-oriented, emotion-oriented, and avoidance-oriented coping styles and selected health behaviors. Female collegiate-level athletes were found to use the task-oriented coping style less frequently and the emotion-oriented and avoidance-oriented styles more frequently compared to their male counterparts. Moreover, male collegiate-level athletes demonstrated a greater tendency to adhere to proper nutrition habits. The study revealed significant relationships between stress coping styles and health behaviors in both groups of the athletes studied.

Conclusions Conducting research on stress coping styles and health behaviors is highly justified, considering the interrelations observed between these variables. The findings suggest that coping styles are associated with specific patterns of health-related behaviors among collegiate athletes. These results may be useful in developing targeted psychological and educational interventions aimed at promoting adaptive coping strategies and healthier lifestyles in student athlete populations.

Keywords: collegiate sports, students, team sports, coping styles, health

Introduction

In recent years, increasing attention has been paid to the psychological factors that influence health-related behaviors, particularly in populations exposed to regular physical and emotional demands. Collegiate athletes represent a unique group, as they must constantly balance academic responsibilities with high-level sports training. Taken together, these factors indicate the necessity of seeking effective solutions to support the mental and physical well-being of this population.

Stress is perceived as a complex defense mechanism that represents the final result of numerous expansive and interdependent biological, psychological, and social factors. A widely accepted model is the transactional theory of stress by Lazarus and Folkman, which emphasizes individual perception [1]. According to these authors, stress is defined as a particular type of relationship between the individual and the

environment, based on the individual's subjective perception.

An individual's characteristic stress coping style, considered one of the personal determinants of coping, is typically expressed through two distinct patterns: the emotion-oriented and the task-oriented style. The former is associated with the generation of negative emotions, a reversal of the initial direction of action, and an attempt to alleviate emotional discomfort. In contrast, the latter implies that the encountered problem does not disrupt the overall direction toward the goal but rather modifies the strategy for achieving it, despite the emergence of negative emotions [1]. One of the most commonly applied models of coping styles in the context of athletes is the framework developed by Endler and Parker [2], which distinguishes three types of coping [3]:

1. Task-oriented coping involves engaging in actions and efforts aimed at solving a problem through cognitive restructuring or attempts to change the situation. This style supports maintaining focus and emotional control.

However, it may become maladaptive in the context of complex and dynamic social problems.

2. Emotion-oriented coping is characteristic of individuals who, in stressful situations, tend to focus on themselves and their emotional experiences. While the goal of this coping style is to reduce stress, over time it may intensify stress and lead to negative outcomes such as anxiety or depression.
3. Avoidance-oriented coping is typical of individuals who, when experiencing stress, tend to avoid thinking about, feeling, or confronting the stressful situation. This style can be adaptive in circumstances involving problems that are beyond one's control.

In the literature, the concept of health behaviors is addressed in a multifaceted manner [4]. Most commonly, it is understood as actions aimed at preventing diseases, detecting them, and improving health and well-being [5]. Within the context of health-oriented behaviors, it is also emphasized that a person's health status and psychological condition depend on both the nature of stressful events and the individual's interpretation of them. Consequently, it is widely acknowledged that managing one's thoughts and emotions is crucial for maintaining mental health. This is supported by contemporary, often convergent, research findings (including studies conducted on physically active individuals) concerning stress coping and health behaviors, which indicate that:

1. Stress impacts health both directly, through autonomic and neuroendocrine responses, and indirectly, by influencing changes in health behaviors [6].
2. Symptoms of stress and depression are associated with unhealthy practices such as sedentary behavior, insufficient sleep, and substance abuse [7].
3. Stress can lead to unhealthy eating behaviors, including increased consumption of unhealthy foods and reduced intake of foods considered healthy [8].
4. There is a positive relationship between the development of stress management skills and improvements in health behavior profiles [9].
5. Health behaviors such as nutrition and physical activity are linked to stress, with evidence suggesting that these associations largely stem from individuals using health behaviors as a means of coping with stress [10].
6. Higher stress levels among employees are associated with unhealthy behaviors, including smoking, low intake of fruits and vegetables, high alcohol consumption, and physical inactivity [6], as well as more frequent consumption of highly processed foods and physical inactivity [6], as well as more frequent consumption of highly

processed foods. Moreover, these poor dietary habits pose risks not only to physical health but also to individuals' mental well-being [11].

In summary, the data suggest that excessive stress may weaken the immune system. When stress is chronic and intense, it can lead to a temporary impairment of immune functioning [12]. Moreover, coping with stress can influence decisions related to behavioral responses, such as the use of psychoactive substances as a means of managing stressors. These actions primarily serve as a substitute for emotional regulation. Such behaviors are also characteristic of avoidance-based coping strategies, which are associated with compulsive overeating, gambling, excessive television watching, and prolonged smartphone use [13].

The analysis of existing research has shown that the issue of stress and health behaviors remains highly relevant, particularly in populations exposed to physical and psychological demands. Scholars emphasize specific features of coping styles and highlight their associations with both adaptive and maladaptive health-related behaviors. Researchers also underscore the role of individual interpretation of stressors and the influence of coping mechanisms on mental and physical well-being. In this context, the necessity of more in-depth investigation into the psychological determinants of health behaviors among physically active individuals becomes evident.

In formulating the research framework, the following hypotheses were proposed:

1. The task-oriented stress coping style is positively correlated with the frequency of engaging in health behaviors among collegiate student-athletes.
2. The emotion-oriented stress coping style is associated with a lower level of health behaviors among collegiate student-athletes.

Based on these assumptions, the aim of the present study was to examine the relationships between stress coping styles and health behaviors among collegiate-level male and female athletes training in team sports.

Materials and Methods

Participants

The study involved collegiate-level athletes representing both sexes and participating in team sports. All participants were within the typical age range for university students and had several years of sports training experience. The group included individuals with diverse levels of training history, and both male and female athletes were represented. Detailed demographic and training-related characteristics of the participants (general and divided by sex) are presented in Table 1.

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Table 1. Characteristics of surveyed student-athletes

Variables	Women (N=49)			Men (N=50)			General (N=99)		
	Range	M±SD	Me	Range	M±SD	Me	Range	M±SD	Me
Age	21-26	22.9 ± 1.4	23	21-27	24.0 ± 1.6	24	21-27	23.4 ± 1.6	23
Training experience (years)	4-18	11.8 ± 2.4	12	8-20	12.6 ± 2.9	12	4-20	12.2 ± 2.7	12
Sport disciplines (N)	F (25)			F (26)			F (51)		
	B (12)			B (12)			B (24)		
	V (12)			V (12)			V (24)		

Note: F – football, B – basketball, V – volleyball.

removed. The participants included both female and male collegiate-level athletes representing three team sports: football, basketball, and volleyball. Age and training experience were comparable between groups, with no significant sex differences observed in terms of the number of years of training. While male participants were slightly older on average than female participants, both groups fell within a similar age range. Each of the three sport disciplines was proportionally represented across both sexes. The distribution of disciplines among male and female athletes was nearly identical, which allowed for balanced comparison across sport types. Median values indicate a relatively consistent training history among participants, and standard deviations suggest moderate variability in age and training experience across the sample. These characteristics provide a reliable foundation for analyzing the relationships between stress coping styles and health behaviors in the context of collegiate team sports.

The participants were selected using purposive sampling. The inclusion criteria were as follows: being of legal age (an adult), holding student status, having a minimum of 48 months of training experience, participating in at least three training sessions per week, and having no active injuries that could affect health status or participation in the study. All participants were informed about the purpose and objectives of the study and were assured of anonymity. The questionnaires were completed in the direct presence of the researcher, who provided clarification and addressed any questions or concerns that arose during the process.

The research procedure was reviewed by the Bioethics Committee of the Poznan University of Medical Sciences (Poland), which issued a statement confirming that the study does not constitute a medical experiment and, in accordance with applicable law, does not require ethical approval.

Research Design

The study followed a cross-sectional correlational design. Two standardized self-report questionnaires were employed to assess stress coping styles and health behaviors:

1. The Coping Inventory for Stressful Situations

(CISS) by Endler and Parker [2, 3]. This instrument requires participants to indicate how frequently they respond in specific ways when confronted with difficult situations. The results are reported across three scales: task-oriented coping (TOC), emotion-oriented coping (EOC), and avoidance-oriented coping (AOC). Analyses have demonstrated high internal consistency for each scale, with Cronbach's alpha coefficients ranging from 0.78 to 0.90, and satisfactory test-retest reliability over a 2–3 week interval ($r = 0.73–0.80$) [3].

2. The Health Behavior Inventory [4]. Designed for use with both healthy and ill adult populations, this instrument assesses general health behavior levels and includes four specific categories: positive psychological attitude (PPA), healthy practices (HP), proper nutrition habits (PNH), and prophylactic behavior (PB). It also provides a general health behavior indicator (HBI). The internal consistency of the overall scale, as measured by Cronbach's alpha, was 0.85, while the subscales ranged from 0.60 to 0.65. The test-retest reliability after six weeks was reported at 0.88 [4].

Statistical analysis

All analyses were conducted using *Statistica* v. 13.3 (StatSoft, USA). The normality of the distribution of dependent variables was assessed using the Shapiro–Wilk test, along with evaluations of skewness and kurtosis. Sex differences were examined using Student's *t*-test. Pearson's *r* correlation coefficient was used to determine the relationships between coping styles and health behaviors. An analysis of covariance (ANCOVA) was performed with sex, age, and coping styles as independent variables. Health behaviors served as dependent variables. To assess potential multicollinearity among predictors, variance inflation factor (VIF) values were calculated.

Results

The results presented in Table 2 show the differences between female and male student-athletes in coping styles and selected health

behaviors. Female participants demonstrated significantly higher scores in emotion-oriented and avoidance-oriented coping styles and lower scores in task-oriented coping compared to their male counterparts. This indicates a tendency among women to rely more on emotional and avoidant responses when dealing with stress, whereas men are more likely to adopt goal-directed coping strategies. With regard to health behaviors, women most frequently reported engaging in behaviors associated with a positive psychological attitude. In contrast, men reported a higher frequency of proper nutrition habits, and this difference was statistically significant. No significant sex differences were observed in general health behavior indicators or in other specific categories such as healthy practices and prophylactic behavior. Overall, the findings highlight sex-based patterns in both coping mechanisms and health-related behaviors. These

differences suggest that sex should be considered an important variable in further analyses examining the relationship between stress coping styles and health behaviors.

Table 3 presents the correlation coefficients between stress coping styles and various categories of health behaviors, calculated separately for female and male collegiate athletes engaged in team sports. Among female athletes, task-oriented coping was positively and significantly correlated with nearly all categories of health behaviors, including proper nutrition habits, prophylactic behavior, and the general health behavior indicator. The strongest associations were observed between task-oriented coping and prophylactic behavior, as well as general health behaviors. In contrast, emotion-oriented coping showed significant negative correlations with multiple health behavior categories, particularly with general health behavior, positive

Table 2. Student athletes (female and male) characteristics in coping styles and healthy behaviors (Student's t-test)

Variables	Women (N=49)					Men (N=50)					t	p	d
	M	Me	Min	Max	SD	M	Me	Min	Max	SD			
TOC	6.02	6	1	10	2.16	7.20	7	3	10	1.76	-2.98	0.004	0.60
EOC	6.27	7	2	9	1.59	4.66	5	1	9	1.97	4.46	0.000	0.90
AOC	6.76	7	4	10	1.59	5.38	5	2	10	2.08	3.69	0.000	0.75
PPA	3.58	3.50	2.66	5.00	0.61	3.67	3.60	2.50	5.00	0.72	-0.65	0.515	-
HP	3.32	3.40	2.00	4.67	0.69	3.55	3.67	2.33	5.00	0.61	-1.81	0.073	-
PNH	3.42	3.50	1.80	5.00	0.82	3.88	3.95	1.83	5.00	0.72	-2.95	0.004	0.60
PB	3.33	3.20	2.00	5.00	0.73	3.37	3.33	1.83	4.83	0.74	-0.22	0.828	-
HBI	68.77	67.50	49.15	89.30	11.44	72.32	72.93	51.60	93.00	10.46	-1.62	0.110	-

Note: TOC – task-oriented coping, EOC – emotion-oriented coping, AOC – avoidance-oriented coping, PPA – positive psychological attitude, HP – healthy practices, PNH – proper nutrition habits, PB – prophylactic behaviour, HBI – general health behaviour indicator, d – Cohen's indicator of effect size

Table 3. Correlations between coping styles and health behaviours by sex

Variables		Women (N=49)					Men (N=50)				
		PPA	HP	PNH	PB	HBI	PPA	HP	PNH	PB	HBI
TOC	r	0.38	0.07	0.35	0.44	0.40	0.30	0.23	0.50	0.46	0.51
	p	0.007	0.622	0.013	0.002	0.004	0.037	0.102	0.000	0.001	0.000
EOC	r	-0.42	-0.23	-0.30	-0.38	-0.45	0.01	-0.15	-0.05	-0.08	-0.09
	p	0.003	0.108	0.04	0.007	0.001	0.965	0.283	0.726	0.587	0.542
AOC	r	0.15	-0.11	-0.03	-0.03	-0.03	-0.12	0.11	-0.31	-0.37	-0.25
	p	0.294	0.446	0.832	0.844	0.835	0.397	0.463	0.030	0.008	0.082

Note: TOC – task-oriented coping, EOC – emotion-oriented coping, AOC – avoidance-oriented coping, PPA – positive psychological attitude, HP – healthy practices, PNH – proper nutrition habits, PB – prophylactic behaviour, HBI – general health behaviour indicator

Table 4. Results of the ANCOVA predicting the health behaviours by coping styles, age and sex

Variables	R2	F df=5;93	p	Indicators	β	-95% CI	+95% CI	t	p	Eta2
PPA	0.08	2.76	0.023	TOC	0.33	0.13	0.54	3.19	0.002	0.10
				EOC	-0.13	-0.35	0.10	-1.13	0.262	0.01
				AOC	0.08	-0.13	0.30	0.78	0.440	0.01
				Age	-0.01	-0.22	0.20	-0.09	0.930	0.00
				Sex	0.05	-0.19	0.29	0.42	0.672	0.00
HP	0.11	3.50	0.006	TOC	0.18	-0.02	0.39	1.79	0.076	0.03
				EOC	-0.32	-0.54	-0.10	-2.87	0.005	0.08
				AOC	0.17	-0.04	0.38	1.59	0.114	0.03
				Age	0.08	-0.13	0.28	0.76	0.448	0.01
				Sex	-0.03	-0.26	0.20	-0.25	0.806	0.00
PNH	0.21	6.30	0.000	TOC	0.38	0.19	0.58	3.94	0.000	0.14
				EOC	-0.06	-0.26	0.15	-0.54	0.591	0.00
				AOC	-0.09	-0.29	0.11	-0.87	0.389	0.01
				Age	-0.04	-0.23	0.15	-0.40	0.693	0.00
				Sex	-0.14	-0.36	0.08	-1.23	0.223	0.02
PB	0.20	5.91	0.000	TOC	0.43	0.24	0.62	4.39	0.000	0.17
				EOC	-0.12	-0.33	0.09	-1.11	0.269	0.01
				AOC	-0.13	-0.34	0.07	-1.33	0.186	0.02
				Age	0.13	-0.06	0.32	1.32	0.189	0.02
				Sex	0.24	0.02	0.46	2.18	0.032	0.05
HBI	0.21	6.12	0.000	TOC	0.42	0.23	0.62	4.33	0.000	0.17
				EOC	-0.18	-0.38	0.03	-1.69	0.095	0.03
				AOC	-0.03	-0.23	0.17	-0.31	0.757	0.00
				Age	0.05	-0.14	0.24	0.52	0.607	0.00
				Sex	0.06	-0.16	0.28	0.56	0.578	0.00

Note: TOC – task-oriented coping, EOC – emotion-oriented coping, AOC – avoidance-oriented coping, PPA – positive psychological attitude, HP – healthy practices, PNH – proper nutrition habits, PB – prophylactic behaviour, HBI – general health behaviour indicator; CI = confidence interval for coefficients. Sex coding: 1 - Men (male athletes), 2 - Women (female athletes)

psychological attitude, and prophylactic behavior. Avoidance-oriented coping in women showed no statistically significant associations with health behaviors. In the group of male athletes, task-oriented coping was also positively correlated with all measured health behavior categories, with the strongest relationships found for proper nutrition habits, prophylactic behavior, and the general health behavior indicator. Unlike the female group, emotion-oriented coping in males did not show any significant correlations with health behaviors. However, avoidance-oriented coping demonstrated significant negative correlations with proper nutrition habits and prophylactic behavior. Overall, the results indicate that task-oriented coping is consistently associated with more favorable health behaviors in both sexes. Emotion-oriented coping appears to have a more detrimental role in women, while avoidance-oriented coping is more

negatively linked to health behavior outcomes in men. These patterns suggest that the relationship between coping styles and health behaviors may be sex-specific and should be examined accordingly in further research.

Table 4 presents the results of the ANCOVA analyses examining the predictive value of stress coping styles, age, and sex in relation to various health behavior outcomes. The models were statistically significant for all analyzed health behavior indicators. The task-oriented coping style emerged as the most consistent predictor. It explained 21% of the variance in both proper nutrition habits and the general health behavior indicator, and accounted for 8% of the variance in positive psychological attitude. Additionally, task-oriented coping, together with sex, explained 20% of the variance in prophylactic behavior. These results suggest a strong and positive role

of goal-directed coping in the maintenance of health-supportive behaviors. Emotion-oriented coping showed a significant negative association only with healthy practices, explaining 11% of the variance in this outcome. Avoidance-oriented coping did not significantly predict any of the health behavior categories in the multivariate models. Sex was found to be a significant predictor only in the model for prophylactic behavior, where being female was associated with higher scores. Age was not a significant predictor in any of the models. Furthermore, all variance inflation factor (VIF) values remained below 1.6, indicating that multicollinearity was not a concern in the analyses. These findings reinforce the importance of task-oriented coping as a beneficial psychological resource for supporting health-promoting behaviors, while also highlighting the limited and context-dependent role of emotion- and avoidance-oriented strategies.

Discussion

The aim of the present study was to examine the relationships between stress coping styles and health behaviors among collegiate-level male and female athletes engaged in team sports. The results indicated that task-oriented coping was positively associated with a range of health-promoting behaviors, while emotion-oriented coping showed negative associations, particularly among female athletes. Avoidance-oriented coping demonstrated limited predictive value. Significant sex differences were also observed in both coping styles and specific health behaviors.

The issue of managing stressful situations is a highly relevant and important topic in contemporary sport psychology, both from a scientific research perspective and in terms of practical application. It concerns the functioning and effectiveness of individuals (athletes) as well as social groups (sports teams). At the same time, increasing attention is being given to the multifaceted nature of health behaviors, which support physical and mental well-being and are recognized as key factors in ensuring optimal performance during competition. Therefore, the aim of the present study was to examine the relationships between stress coping styles [2, 3] and health behaviors [4] among student-athletes engaged in team sports at the collegiate level. The formulation of the study objective was based on a body of literature indicating links between stress, the effectiveness of coping strategies, and a range of health-related and risk behaviors, such as compulsive eating, gambling, smartphone use [13], sedentary lifestyle, insufficient sleep, use of psychoactive substances [7], and increased consumption of unhealthy foods [6, 8, 14].

The results of the present analyses indicated

that among young individuals participating in team sports, female athletes demonstrated lower levels of task-oriented coping style. This style is characterized by analyzing the causes of stress, planning coping strategies, and taking specific action. In contrast, female athletes exhibited higher levels of emotion-oriented coping, which is typical of individuals who tend to focus on themselves and their emotional experiences in stressful situations, as well as higher levels of avoidance-oriented coping, which reflects a tendency to avoid thinking about, experiencing, or engaging with the stressful situation. These results may be attributed to socially ingrained norms related to emotional expression and approaches to coping with difficulties, or to individual sex-based differences in how stress is interpreted. Moreover, the findings are consistent with previous research identifying sex differences in coping styles across various populations, including the general population [3], student samples [15, 16], and athletes [17, 18].

Furthermore, the sex-based analyses revealed that female participants were less likely to adhere to proper nutritional habits, particularly in terms of food choices [4]. This result contrasts with earlier reports [19, 20]. The discrepancy may be explained by the observed correlations between proper nutrition habits and coping styles. Specifically, the greater tendency among women to rely on emotion-oriented coping in challenging situations, as also confirmed by the present findings, along with a weaker goal-directed focus and lower consistency in maintaining dietary plans despite initially high motivation, may account for this difference compared to men [21].

In both examined groups, female and male, the task-oriented coping style was positively associated with health behaviors such as proper nutrition habits, positive psychological attitude, prophylactic behavior, and the general health behavior indicator. Furthermore, this problem-focused coping style accounted for the largest proportion of variance in health behavior outcomes, particularly in relation to adherence to proper nutrition habits and engagement in prophylactic behavior. These findings suggest that individuals who prefer task-oriented coping and more frequently engage in problem-solving through cognitive restructuring demonstrate better health self-management. This includes more consistent participation in preventive healthcare, greater dietary control and reduced consumption of unhealthy foods, higher levels of physical activity that support health, lower risk of addiction, and a more proactive approach to maintaining psychological well-being.

It is also possible that individuals who lead a healthy lifestyle possess greater psychological and physical resources, which in turn enable more effective stress management using task-oriented

strategies. From this perspective, health-promoting behaviors and coping style may mutually reinforce each other. Similar findings have been reported in earlier studies. For example, individuals using task-oriented coping styles were found to experience lower levels of depression and were more likely to engage in activities that support psychological health [22]. They also reported lower levels of burnout, as shown in meta-analytic data [23], achieved more favorable health indicators and reduced cortisol levels [24], and were less likely to rely on alcohol or tobacco to manage stress [25].

The present analysis also revealed that, among women, the emotion-oriented coping style was negatively associated with the aforementioned aspects of health behaviors, with the exception of health practices. These results may be partially explained by social factors, such as the higher levels of stress experienced by women due to societal pressure to maintain a restrictive diet. This type of strain may heighten emotional sensitivity, contribute to the intensification of psychological symptoms, lead to episodes of uncontrolled eating, and reduce adherence to health-related recommendations. In contrast, among men, the negative association between the avoidance-oriented coping style and both proper nutrition and preventive behaviors may be linked to a general tendency to avoid confronting health-related problems. This tendency is often reflected in reluctance to engage in activities that could result in receiving potentially distressing health information, such as preventive screenings or routine medical check-ups.

Similar trends have been observed in previous studies on related topics. Women who employed emotion-focused coping strategies reported higher levels of anxiety and poorer sleep quality, both of which negatively affected their health outcomes [26]. Other analyses showed that during the COVID-19 pandemic, women were more likely to change their eating habits in response to emotions, consume more highly processed foods, and pay less attention to their overall health [27]. Additionally, emotion-oriented coping in women has been found to correlate positively with body dissatisfaction, low self-esteem, compulsive eating [28], and a higher risk of developing eating disorders [29]. It has also been demonstrated that among adolescent girls, emotion-focused coping is associated with greater consumption of fast food and sweets, whereas boys are more likely to avoid eating when under stress [30]. Furthermore, individuals who rely on avoidance coping strategies, particularly men, are more likely to neglect preventive screenings, avoid medical consultations [31], and show lower adherence to medical advice regarding cardiovascular disease prevention [32].

Study Limitations

Recognizing the limitation of conducting measurements solely among student athletes participating in team sports, it should be noted that the results cannot be fully generalized to the entire population of collegiate-level athletes. This limitation affects the scope of inference and may constrain data interpretation to the specific characteristics of this group. Measuring such a homogeneous population may fail to capture the diversity of stress coping styles and health behaviors that could be present among athletes engaged in individual sports or among those participating at a recreational level, such as non-student athletes. Moreover, there is a risk that the specific psychophysical traits of the participants, as well as the cultural norms inherent to team sports environments, may have influenced the results. This may limit the applicability of the findings to other athletic contexts. For this reason, it is recommended that future research include individuals representing various levels of sport involvement, both recreational and elite, and those participating in different types of sport disciplines, including individual sports. This approach would allow for a more comprehensive understanding of the relationships under investigation. Additionally, to enhance the originality of future studies, it may be beneficial to incorporate qualitative methods such as narrative interviews or to include moderating variables, for example the level of competition.

The findings of the present study highlight the existence of sex differences in stress coping styles and health behaviors, as well as the associations between specific coping styles and behaviors aimed at maintaining or improving health. Task-oriented coping emerged as the most significant predictor of health-promoting behaviors. These results emphasize the importance of continued psychoeducational and health-promotion initiatives that focus on developing coping competencies. Such efforts are particularly relevant in light of existing research that points to the widespread risks associated with lifestyle-related, or civilization-related, diseases.

Conclusions

The present study contributes to a deeper understanding of the role of stress coping styles in shaping health-related behaviors among student-athletes engaged in team sports. It emphasizes the relevance of psychological resources in the context of maintaining a healthy lifestyle and supports the integration of coping skills training into athlete education and health promotion programs.

The findings reinforce the importance of adopting a holistic approach that considers both psychological and behavioral dimensions of well-

being in sport populations. Future research should continue exploring these relationships across diverse athletic groups, including participants from individual disciplines and varying levels of sport involvement, in order to broaden the applicability of findings and inform more tailored interventions.

Conflict of interests

The authors declare that there is no conflict of interests.

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