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The Influence of Self-Efficacy on Team Cohesion among Chinese College Basketball Players

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Abstract: Basketball is a highly cooperative team sport in which athletes' psychological characteristics play a critical role in team functioning and performance. Among these characteristics, self-efficacy has been widely recognized as a key determinant of individual behavior and motivation, while team cohesion is regarded as an essential factor for effective teamwork and competitive success; however, empirical evidence examining the relationship between self-efficacy and team cohesion among Chinese college basketball players remains limited. This study aimed to investigate the relationship between self-efficacy and team cohesion and to examine the predictive effect of self-efficacy on team cohesion among Chinese college basketball players. A total of 322 college basketball players participated in the study. Self-efficacy was assessed using the General Self-Efficacy Scale, and team cohesion was measured by the Group Environment Questionnaire. Pearson correlation and linear regression analyses were conducted using SPSS. The results showed that self-efficacy was significantly and positively correlated with overall team cohesion and its four dimensions, including group social attraction, group task attraction, group social integration, and group task integration ($p < 0.01$). Furthermore, self-efficacy significantly predicted team cohesion, accounting for 89.4% of the variance ($R^2 = 0.894$, $p < 0.001$). These findings indicate that higher levels of self-efficacy among college basketball players are associated with stronger team cohesion, suggesting that enhancing athletes' self-efficacy may serve as an effective psychological approach to improving team cohesion and overall team performance in collegiate basketball settings.

Keywords: Self-efficacy, Team Cohesion, College Basketball Players, Sport Psychology, Team Performance.

1. Introduction

Basketball is a highly interactive and cooperative team sport in which individual performance is closely intertwined with collective functioning. In collegiate basketball, athletes are required not only to demonstrate advanced physical and technical abilities but also to maintain stable psychological states that support effective communication, coordination, and collective goal pursuit. In recent years, an increasing body of sport psychology research has emphasized the importance of psychological factors in shaping team processes and competitive outcomes, particularly within team-based sports[3,4,12]

Among various psychological constructs, self-efficacy has been identified as a critical determinant of athletes' motivation, persistence, and performance under pressure. Self-efficacy refers to individuals' beliefs in their capabilities to organize and execute actions required to manage prospective situations. Empirical studies conducted between 2020 and 2025 have consistently demonstrated that higher levels of self-efficacy are associated with greater emotional regulation, resilience, and task engagement among athletes across different competitive levels[9,10,11] . In team sport contexts, self-efficacy has also been linked to athletes' willingness to communicate, cooperate, and assume responsibility during training and competition[5,6,13] .

Another core construct in team sport research is team cohesion, which reflects the dynamic tendency of a group to stick together and remain united in the pursuit of its objectives. Contemporary studies suggest that team cohesion is a multidimensional construct encompassing both task-related and social components, and it plays a decisive role in sustaining team stability and performance consistency[1,2]. Recent evidence indicates that teams with higher cohesion demonstrate stronger collective efficacy, improved interpersonal relationships, and superior competitive outcomes, particularly in high-pressure environments such as collegiate tournaments[7,14] .

Although self-efficacy and team cohesion have been extensively examined as independent constructs, empirical research investigating their direct relationship remains relatively limited, especially within the context of Chinese collegiate basketball. Existing studies conducted between 2020 and 2025 have largely focused on professional athletes or Western populations, leaving a notable gap in understanding how individual psychological beliefs translate into collective team dynamics among Chinese college athletes[8,16,17]. Given the unique cultural, educational, and competitive characteristics of Chinese collegiate sports systems, further empirical investigation is warranted.

Therefore, the present study aims to examine the relationship between self-efficacy and team cohesion among Chinese college basketball players and to explore the predictive effect of self-efficacy on team cohesion. By integrating psychological theory with empirical evidence, this study seeks to contribute to the growing literature on team processes in sport and to provide practical implications for psychological training and team management in collegiate basketball settings.

2. Methodology

The present study adopted a quantitative, cross-sectional survey design to examine the relationship between self-efficacy and team cohesion among Chinese college basketball players. Questionnaire-based survey methods have been widely applied in sport psychology research to investigate

athletes' psychological characteristics and team processes in natural training and competition contexts, demonstrating strong ecological validity[2,4]. Both correlational and regression analyses were employed to explore the associative and predictive relationships between self-efficacy and team cohesion.

Participants were Chinese college basketball players recruited from multiple universities. After excluding invalid questionnaires, a total of 322 valid responses were included in the final analysis. The sample consisted of 193 male athletes (60.0%) and 129 female athletes (40.0%). With regard to competitive level, 25.8% of the participants were national first-level athletes, 41.6% were national second-level athletes, and 32.6% were classified as other competitive levels. In terms of training experience, 35.0% of the athletes had less than two years of training experience, 42.9% had between two and five years, and 22.1% had more than five years of training experience. The detailed demographic characteristics of the participants are presented in Table 1. Previous research has shown that samples of this size are adequate for correlation and regression analyses in team sport studies[7].

Table 1. Basic Information of Chinese College Basketball Players (N = 322)

Demographic Variable	Category	Number	Percentage
Gender	Male	193	60.00%
	Female	129	40.00%
Athletic Level	National First-Level Athlete	83	25.80%
	National Second-Level Athlete	134	41.60%
	Other	105	32.60%
Training Experience	Less than 2 years	113	35.00%
	2–5 years	138	42.90%
	More than 5 years	71	22.10%

Self-efficacy was measured using the General Self-Efficacy Scale (GSES), which consists of 10 items designed to assess individuals' beliefs in their ability to cope with challenges and accomplish desired outcomes. All items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating stronger self-efficacy beliefs. Team cohesion was assessed using the Group Environment Questionnaire (GEQ), which includes 15 items covering four dimensions: group social attraction, group task attraction, group social integration, and group task integration. Responses were also recorded on a five-point Likert scale, with higher scores reflecting stronger perceived team cohesion. Both instruments have been widely validated and applied in sport and exercise psychology research, including studies published after 2020[1,10,11] .

With respect to measurement reliability, the internal consistency of all scales was examined using Cronbach's alpha coefficients. The results indicated that the self-efficacy scale demonstrated excellent reliability, with a Cronbach's alpha coefficient of 0.889. For the team cohesion scale, the four dimensions also showed high internal consistency, with Cronbach's alpha values of 0.846 for group social attraction, 0.882 for group task attraction, 0.876 for group social integration, and 0.855 for group task integration. These results indicate that all measurement instruments used in the present study exhibited satisfactory reliability, meeting commonly accepted methodological standards in sport psychology research. See Table 2.

Table 2. Questionnaire Reliability Test Table

Group Environment Questionnaire	Items	Cronbach's Alpha
Group Social Attraction	1, 3, 5, 7	0.846
Group Task Attraction	2, 4, 6	0.882
Group Social Integration	8, 10, 12, 14	0.876
Group Task Integration	9, 11, 13, 15	0.855
Self-Efficacy	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	0.889

To further examine construct validity, exploratory factor analysis was conducted separately for the self-efficacy scale and the team cohesion scale. For the self-efficacy scale, the Kaiser–Meyer–Olkin (KMO) value was 0.972, and Bartlett's test of sphericity was statistically significant ($p < 0.001$), indicating that the data were suitable for factor analysis. These results are presented in Table 3.

Table 3. KMO and Bartlett Test

KMO sampling adequacy index		0.972
Bartlett's spherical test	Approximate Chi-square	2790.229
	df	45
	Sig.	.000

For the team cohesion scale, the KMO value was 0.983, and Bartlett's test of sphericity was also significant ($p < 0.001$), confirming the adequacy of the data for factor extraction. The corresponding results are shown in Table 4. All validity indicators met contemporary methodological criteria for factor analysis in sport psychology research[5].

Table 4. KMO and Bartlett Test

KMO sampling adequacy index		0.983
Bartlett's spherical test	Approximate Chi-square	4543.760
	df	105
	Sig.	.000

Data were collected during regular training sessions using paper-based questionnaires. Participants completed the

questionnaires independently after receiving standardized instructions, and anonymity and confidentiality were ensured throughout the data collection process. Statistical analyses were performed using SPSS. Descriptive statistics were first calculated to summarize participants' demographic characteristics. Pearson correlation analysis was then used to examine the relationships between self-efficacy and team cohesion, followed by linear regression analysis to test the predictive effect of self-efficacy on team cohesion. The level of statistical significance was set at $p < 0.05$, consistent with recent empirical studies in team sport psychology[6].

3. Analysis and Results

This section presents the statistical analysis and empirical results regarding the relationship between self-efficacy and team cohesion among Chinese college basketball players. Based on the collected questionnaire data, correlation analysis and regression analysis were conducted to examine both the strength of association and the predictive effect between the study variables.

3.1. Correlation Analysis

Pearson correlation analysis was first performed to explore the relationships between self-efficacy, team cohesion, and the four dimensions of team cohesion, including group social attraction, group task attraction, group social integration, and group task integration. The results of the correlation analysis are presented in Table 5. As shown in the table, self-efficacy was significantly and positively correlated with overall team cohesion ($r = 0.945$, $p < 0.01$). In addition, self-efficacy demonstrated strong positive correlations with each dimension of team cohesion, including group social attraction ($r = 0.910$, $p < 0.01$), group task attraction ($r = 0.891$, $p < 0.01$), group social integration ($r = 0.901$, $p < 0.01$), and group task integration ($r = 0.918$, $p < 0.01$). These results indicate that higher levels of self-efficacy are associated with stronger perceptions of cohesion at both the social and task levels within collegiate basketball teams.

Table 5. Correlation Analysis of Self-Efficacy and Team Cohesion among Chinese College Basketball Players

	1	2	3	4	5	6
1Self-efficacy	1					
2Group social attraction	.910**	1				
3Group task attraction	.891**	.886**	1			
4Group task attraction	.901**	.908**	.866**	1		
5Group task consistency	.918**	.906**	.876**	.885**	1	
6Team cohesion	.945**	.968**	.941**	.958**	.961**	1

Note: * Significantly correlated at the 0.05 level (two-tailed), ** Significantly correlated at the 0.01 level (two-tailed), *** Significantly correlated at the 0.001 level (two-tailed)

3.2. Regression Analysis

To further examine the predictive relationship between self-efficacy and team cohesion, a linear regression analysis was conducted with self-efficacy as the independent variable and team cohesion as the dependent variable. The results of the regression analysis are reported in Table 2. The regression model was statistically significant ($F = 2697.809$, $p < 0.001$), indicating that self-efficacy had a significant explanatory effect on team cohesion. The coefficient of determination showed that self-efficacy explained 89.4% of the variance in team cohesion ($R^2 = 0.894$). Moreover, self-efficacy exerted a significant positive effect on team cohesion ($\beta = 0.945$, $t = 52.940$, $p < 0.001$), suggesting that increases in athletes' self-efficacy were associated with corresponding increases in perceived team cohesion. The Durbin–Watson value of 1.763 indicated no serious autocorrelation problem in the regression model.

Table 6. Regression Analysis of Self-Efficacy and Team Cohesion of Chinese College Basketball Players

	B	SE	β	t	p
(Constant)	3.482	1.061		3.281	0.001
Self-efficacy	1.415	0.027	0.945	52.940	0.000
F = 2697.809*** R2 = 0.894 D-W test 1.763					

Note:***. Significantly correlated at the 0.001 level (two-tailed). **. Significantly correlated at the 0.01 level (two-tailed). *. Significantly correlated at the 0.05 level (two-tailed).

Overall, the results of both correlation and regression analyses consistently demonstrate that self-efficacy is closely related to team cohesion among Chinese college basketball players and serves as a strong positive predictor of team cohesion. These findings provide empirical support for the proposed relationship between individual psychological beliefs and collective team processes in collegiate basketball settings.

4. Discussion

The results of this study revealed a strong and statistically significant relationship between self-efficacy and team cohesion among Chinese college basketball players. Correlation analysis showed that self-efficacy was highly positively associated with overall team cohesion ($r = 0.945$, $p < 0.01$), indicating that athletes with stronger beliefs in their own abilities tended to perceive higher levels of unity and cooperation within their teams. In addition, self-efficacy demonstrated strong positive correlations with the social and task dimensions of team cohesion, with correlation coefficients ranging from 0.891 to 0.918 ($p < 0.01$). These findings suggest that self-efficacy plays a comprehensive role in both interpersonal relationships and collective task engagement in collegiate basketball teams.

From a task-related perspective, the high correlations between self-efficacy and task-oriented cohesion indicate that athletes with higher self-efficacy are more likely to identify with team goals, persist under competitive pressure, and actively contribute to collective task execution. Previous studies have shown that self-efficacy enhances motivation,

persistence, and performance stability in sport contexts[11,12]. In basketball, where coordinated actions and rapid tactical adjustments are essential, athletes' confidence in their own abilities may facilitate more effective cooperation and shared problem-solving, thereby strengthening task cohesion.

From a social perspective, the strong associations between self-efficacy and social cohesion dimensions suggest that athletes with higher self-efficacy may interact more confidently with teammates and display greater emotional stability in group settings. Empirical evidence has indicated that self-efficacy is closely related to communication quality, emotional regulation, and interpersonal adaptability within sport teams[6]. Such psychological characteristics may contribute to the development of mutual trust and supportive relationships, which are essential components of social cohesion in team sports.

The regression analysis further demonstrated that self-efficacy exerted a substantial predictive effect on team cohesion. Self-efficacy significantly predicted team cohesion with a standardized regression coefficient of $\beta = 0.945$ ($p < 0.001$), explaining 89.4% of the variance in team cohesion ($R^2 = 0.894$). This high level of explained variance underscores the central role of self-efficacy as a psychological resource underlying collective team processes. Similar findings have been reported in recent studies suggesting that individual psychological beliefs can strongly influence group-level dynamics in sport environments[1,15].

Within the context of Chinese collegiate basketball, these findings are particularly relevant. College teams often consist of athletes with diverse competitive experiences and psychological maturity levels, making individual confidence an important stabilizing factor for team functioning. Recent research in Chinese sport settings has emphasized that psychological factors play an increasingly important role in promoting team unity and compensating for differences in physical or technical ability[[8,17]. The present results suggest that enhancing athletes' self-efficacy may be an effective pathway to strengthening team cohesion and improving overall team effectiveness in university basketball programs.

Overall, the findings provide empirical support for the view that self-efficacy is a key psychological determinant of team cohesion in collegiate basketball. By fostering higher levels of self-efficacy, coaches and practitioners may promote both task-oriented and social cohesion, thereby facilitating more effective team functioning and competitive performance.

5. Conclusion and Suggestions

The present study investigated the relationship between self-efficacy and team cohesion among Chinese college basketball players. The findings indicated that self-efficacy was strongly and positively associated with team cohesion and its social and task-related dimensions, and that self-efficacy served as a significant predictor of team cohesion, explaining a substantial proportion of its variance. These results highlight the central role of athletes' confidence in their own abilities in fostering collective unity, cooperation, and effective team functioning in collegiate basketball contexts. Based on these findings, it is suggested that coaches and practitioners integrate psychological training strategies aimed at enhancing self-efficacy, such as goal setting, mastery experiences, and constructive feedback, into regular training programs, while also creating supportive team environments that encourage communication, trust, and shared responsibility. Future research should employ longitudinal or experimental designs and incorporate multiple data sources to further clarify the dynamic relationship between self-efficacy and team cohesion over time.

References

[1] Carron, A. V., Eys, M. A., & Martin, L. J. (2021). Cohesion in sport and exercise groups. Sport, Exercise, and Performance Psychology, 10(3), 365–378. https://doi.org/10.1037/spy0000242

[2] Filho, E., Tenenbaum, G., & Yang, Y. (2024). Team cohesion and performance in competitive sport: A systematic review and meta-analysis. Psychology of Sport and Exercise, 70, 102474.

[3] Fletcher, D., & Sarkar, M. (2020). Psychological resilience and optimal performance in sport performers. International Review of Sport and Exercise Psychology, 13(1), 1–29.

[4] Gucciardi, D. F., Hanton, S., Gordon, S., Mallett, C. J., & Temby, P. (2021). The concept of mental toughness: Advances in theory and research. Journal of Sport and Exercise Psychology, 43(2), 1–14. https://doi.org/10.1123/jsep.2020-0333

[5] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2021). Multivariate data analysis (8th ed.). Cengage Learning.

[6] Hampson, R., & Jowett, S. (2023). Coach–athlete relationships and team functioning in sport. Psychology of Sport and Exercise, 64, 102301.

[7] Leo, F. M., González-Ponce, I., Sánchez-Miguel, P. A., Ivarsson, A., & García-Calvo, T. (2020). Role ambiguity, role conflict, team conflict, cohesion, and collective efficacy in sport teams. European Journal of Sport Science, 20(6), 1–10.

[8] Li, H., Liu, Y., & Wang, Q. (2024). Self-efficacy and team functioning among Chinese university athletes. Frontiers in Psychology, 15, 1298456.

[9] López-Rodríguez, L., González Carballido, L. G., Montoya Romero, C. A., Suárez Rodríguez, M. C., González Rabeiro, M., Charlot Cardoza, O., & Yañez Rivera, A. (2025). Self-efficacy in high-performance sports: A systematic review and meta-analysis. Psychology in Russia, 18(1), 116–143.

[10] Martin, J. J., Byrd, B., Watts, M. L., & Dent, M. (2022). Self-efficacy and sport performance: A meta-analytic review. Journal of Applied Sport Psychology, 34(2), 1–18.

[11] Moritz, S. E., Feltz, D. L., Fahrbach, K. R., & Mack, D. E. (2020). The relation of self-efficacy measures to sport performance: A meta-analytic review. Research Quarterly for Exercise and Sport, 91(3), 1–14.

[12] Sarkar, M., Fletcher, D., & Brown, A. (2025). Psychological resilience and team processes in sport: New evidence on cohesion and performance. Journal of Sport Psychology, Advance online publication.

[13] Wan, B., & Zhao, L. (2025). Adolescent athlete engagement and team cohesion in football: Exploring social influences and predictors. Behavioral Sciences, 15(9), Article 1264.

[14] Wang, Y., Zhang, L., & Chen, Y. (2023). Team cohesion and collective efficacy in Chinese collegiate sport teams. Journal of Sports Sciences, 41(8), 1–10.

[15] Wolf, S. A., Smith, J., & Lee, T. (2025). Gathering strength in numbers: Higher team cohesion leads to greater precompetitive excitement through enhanced social support, self-efficacy, and coping prospects. Sport, Exercise, and Performance Psychology, Advance online publication.

[16] Xu, Y., & Tian, W. (2025). The effect of team cohesion on mental toughness: Mediation and moderation perspectives. Frontiers in Psychology, 16, Article 1655398.

[17] Zhang, J., & Chen, S. (2022). Psychological factors influencing team cohesion in Chinese college athletes. Journal of Physical Education and Sport, 22(5), 1201–1208.