

From Stress to Success: The Efficacy of Coping Strategies in Enhancing Students-Athletic Performance and Satisfaction

Nur Afifah Mohmed Nor, Mohamad Nizam Nazarudin,
Zakiah Noordin

Center for the Education and Community Wellbeing Study, Faculty of Education, Universiti
Kebangsaan Malaysia 43600 Bangi, Selangor, Malaysia, ²IPG Kampus Pendidikan Islam,
43657 Bandar Baru Bangi, Selangor, Malaysia
Corresponding Author Email: mohdnizam@ukm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARPED/v13-i3/22035>

DOI:10.6007/IJARPED/v13-i3/22035

Published Online: 03 July 2024

Abstract

This research seeks to investigate how athletic coping strategies impact satisfaction and performance in sports competitions. The study sample consisted of 314 student-athletes who competed in the Malaysian Matriculation Co-Curriculum Sports Carnival 2023 edition. The Athletic Coping Skills Inventory (ASCI-28) has 28 items, The Sports Success Scale consists of 29 items, while the Satisfaction Scale for Athletes (SSA) includes 16 extra items. The researcher distributed the questionnaire using Google Form three hours before the tournament. The data was analysed using SPSS Version 29. The Kolmogorov-Smirnov normality test indicates that the p-value exceeds 0.05, falling between 0.134 and 0.430. The test for internal consistency revealed Cronbach's alpha values ranging from 0.76 to 0.88. The results showed that there was no difference between individual and group activities for coping skills, satisfaction, and success. The findings indicate a correlation between contentment and coping skills ($r=.377$, $p=0.001$). The findings indicate a significant correlation ($r=.594$, $p=0.001$) between success and coping skills. A regression analysis was conducted to examine the significant correlation between coping skills, satisfaction, and achievement. The study's results indicate that coping skills significantly impact satisfaction and accomplishment. Effective coping skills are connected to increased satisfaction in sports participation, whereas effective coping tactics are correlated with greater levels of accomplishment in athletes' chosen sports. Future studies should investigate the intricacies of this connection, such as the causative pathways, mediating variables, and the effects of treatments.

Keywords: Coping Skills, Satisfaction, Success, Athlete, Matriculation

Introduction

Athletes' success is not just about how well they can play their sport, it is also about how well they can handle challenges, both on and off the field. Learning how to deal with these challenges through training and education is important for their personal growth and career (Cosma et al., 2020). Athletes, like others, can also experience mental health challenges that

influence their skills and performance. Often, they see tough competitions as challenges to overcome, aiming to reach their goals with determination. However, they do not always use basic mental training techniques that could help them cope better. Bhaskar (2021) points out that athletes use specific strategies to keep their mental health in check. These strategies, known as athletic coping skills, involve certain ways of thinking and acting to help athletes stay mentally fit. These skills include being able to solve problems, take advice from coaches, stay focused, be confident, set goals, prepare mentally, perform under pressure, and stay calm. Athletes need to understand how their emotions and mindset affect their performance and to work on regulating their emotions during competitions.

Athlete Coping Skills

Athletes can boost their coping skills by staying motivated, setting realistic yet challenging goals, communicating well with others, using positive self-talk and mental imagery, and managing their anxiety and emotions effectively (Martens et al., 1990). These psychological skills are key to an athlete's well-being and performance (Fry et al., 2021). Being physically fit is essential, but having a strong and resilient mindset, along with the ability to deal with stress, can set an athlete apart from the rest. Cosma et al (2020) found that athletes often rely on staying calm and being coachable as their main ways to cope. However, they don't use strategies for handling stress and challenges as much. Males, in particular, are good at making plans and setting goals, and they are better at anticipating tough situations than females. Males also tend to be more confident in their abilities and more willing to take on challenges. Good coping skills matter for athletes, not just for feeling good about their performance but for actual success in sports. These skills are especially important when dealing with injuries and getting back into the game (Tomé-Lourido et al., 2018; Townsend et al., 2022). The more athletes use these psychological skills, the happier they are with their performance, showing that these skills make a difference (Un-Kyung & Ho-Sang, 2023). Improving coping skills through mental training can make athletes feel better emotionally, help them handle stress better, improve their strategies for performing, and boost their confidence (Brand et al., 2014).

Dugdale et al (2002) showed that athletes who see their coping skills as automatic (thanks to training) find them more effective. Good training means athletes can handle what would exhaust most people as just another challenge. Being able to cope with stress is key not just for sports, but for a good quality of life and mental health (Nicholls et al., 2016; Lazarus, 2000). Coping skills are how we think and act to get through tough or stressful times (Lazarus & Folkman, 1984). Professional athletes need to manage the stress that comes with competing, like the pressure to perform, fear of failure, injuries, and more (Gaudreau et al., 2010). There are many strategies they can use, like taking a break, analysing the situation, seeking help, using mental imagery, expressing emotions, or mentally escaping from the stress (Doron & Martinent, 2017; Gaudreau & Blondin, 2002). Good coping skills can help athletes manage their feelings, stay focused, perform better, and avoid anxiety. For instance, athletes who are better at coping might recover from concussions with fewer long-term effects (Russo et al., 2024). Specialised athletes of all ages with strong coping skills also tend to have a stronger sense of their athletic identity (Christino et al., 2021).

Athlete Satisfaction

Athlete satisfaction is a key concept in sports psychology, highlighting the positive feelings that come from a thorough look at all the aspects of sports involvement, including the setup,

how things are done, and the outcomes (Chelladurai & Riemer, 1997). It is essentially about how happy or content athletes are with their experience in sports. Understanding how athletes feel about their own experiences is vital because they are at the heart of all sports activities. How satisfied an athlete is with their training and competition can greatly affect their self-view and overall mental health? Recognising and valuing an athlete's level of satisfaction is crucial for ensuring they have a positive and successful experience in sports (Salh & Rathee, 2015).

Athletic satisfaction is described as "a pleasant mental and emotional state resulting from an in-depth examination of the systems, techniques, and outputs associated with the athletics action" (Riemer & Chelladurai, 1998). Riemer and Chelladurai (1998) outlined specific ways to look at different parts of sports satisfaction. First, any aspect of satisfaction should be connected to either achieving success, reaching goals, or the efforts and leadership that lead to these achievements. Secondly, these aspects should cover both team and individual efforts and results, highlighting the idea that personal goals can sometimes be met through the team's hard work and standout performances. This viewpoint encourages seeing the team as an entity that is distinct from the individual. Lastly, when categorizing aspects of sports satisfaction, it is crucial to take into account both the task-specific elements and the social context. This means looking at how well the work is done, the processes involved, and how people get along and support each other in the sports setting.

Sports Success

Attaining optimal performance in a sport is an ongoing learning process that involves consistent practice and the enhancement of basic skills (Starkes & Ericsson, 2003). Integrating physical, mental, and technical abilities is crucial for achieving peak performance in sports (Vaez Mousavi & Mosayebi, 2011). The level of an athlete's motivation significantly impacts their performance. Achievement motivation encompasses the drive to succeed in difficult tasks, outperform others, overcome challenges, reach personal objectives, and feel a feeling of pride (Weiten, 2004). The goal orientation hypothesis considers factors such as goal orientation, perceived abilities, and successful conduct to be essential. Atkinson proposed that elite athletes are highly competitive, very tenacious in their quest for greatness, and capable of performing at a superior level despite the possibility of failure (Lavan & Gill, 2000).

This study was conducted to investigate how student-athletes' performance and success in sports are influenced by psychological factors such as athletic coping strategies, which are important in sports psychology. The research aims to provide information on the influence of coping strategies on performance and satisfaction in sports among the Malaysia Education Ministry Matriculation student-athletes during a tournament.

Research Hypothesis

H₀₁ There is no significant difference in Matriculation student-athletes' coping skills between the team and individual sports.

H₀₂ The coping skills and satisfaction of Matriculation student-athletes are not significantly related.

H₀₃ The coping skills and sports success of Matriculation student-athletes are not significantly related.

H₀₄ The Matriculation student-athletes coping skills do not significantly affect their satisfaction.

H₀₅ The Matriculation student-athletes coping skills do not significantly affect their sports success.

Methodology

This research used a descriptive and correlational approach. All Malaysia Education Ministry matriculation student-athletes are included in the statistics population, which are 1687 individuals who participate in the Matriculation Co-curriculum Carnival. The sample size was determined using the sample size estimate procedure proposed by Kejcic and Morgan (1970). The number of people picked using the basic random selection approach was 314. Information was gathered using the three standard questionnaires. Smith et al. (1994) created the Athletic Coping Skills Inventory (ACSI) which consists of 28 questions that are rated on a 4-point Likert scale ranging from 0 (seldom) to 3 (practically regularly). The assessment produces a comprehensive score for managing different obstacles and risks in sports, along with 7 specific areas. After reviewing the literature on sports science and consulting with experts, Mousavi and Vaez Mousavi (2015) created the Sports Success Scale, a multi-dimensional instrument for assessing the psychological aspects that significantly impact athletic success.

Five mental aspects were identified by SSS factor analysis as crucial to optimal athletic performance. When in the flow state, one's level of arousal is just right and their mental state is one of peak efficiency. A high degree of athleticism, precision, and coordination in performance; the capability to replicate the action; and attention, which is the ability to concentrate on a small set of stimuli or occurrences. Achievement motivation, a sense of belonging to a particular sport, a drive to succeed at difficult tasks, an obsession with perfection, the desire to overcome obstacles, and a sense of stability in maintaining this behaviour are all highlighted.

Athletes Satisfaction Questionnaire

Caliskan and Baydar (2016) created the Satisfaction Scale for Athletes (SSA) which consists of sixteen questions to be completed on a Likert scale with a score of 5 (1 = not happy at all to 5 = highly satisfied). The SSA measures athlete satisfaction in three different areas: satisfaction with the coach, performance as a whole, and teammates' contentment. Version 29 of the SPSS program was used to examine the data. For quantitative variables, descriptive statistics were shown as the mean and standard deviation.

To identify where coping mechanisms originated, the regression coefficient was used in predicting athletic success and satisfaction. The Kolmogorov-Smirnov normality test indicates that the p-value, which varies from 0.134 to 0.430, is more than 0.05. The internal consistency test indicated between 0.76 and 0.88 for Cronbach's alpha.

Result and Discussion

Demographic

The data acquisition process involved 314 student-athletes who competed in the Malaysian Matriculation Co-Curriculum Sports Carnival. Demographic characteristics such as gender, age, and sports category were recorded. According to Table 1, the number of respondents based on the ratio is balanced (50% male and 50% female) athletes. Based on age, a total of 152 athletes (48.40%) are 18 years and below. A total of 162 people (51.60%) are in the age range of 18 years and above. Meanwhile, there are 117 athletes (37.30%) active in individual sports, while 167 athletes (62.70%) participate in team sports. The selection of a sample of 314 athletes was based on individual and team sports such as football, netball, volleyball,

squash, badminton, pétanque, sepak takraw, tennis, and athletics. The researcher distributed the questionnaire to athletes using Google Form three hours before the tournament.

Table 1

Descriptive Analysis of Demographic

		Frequency	Percentage
Gender	Male	157	50.00
	Female	157	50.00
Age	18 years below	152	48.40
	18 years above	162	51.60
Category	Individual Sport	117	37.30
	Team Sport	197	62.70

Athletes' Coping Skills

Based on the result of the study in Table 2, the Matriculation student-athletes capacity to use coping skills was at medium-high and medium-low levels.

Table 2

Descriptive analysis of athletic coping skills

Athletic coping skills subscale		Individual sport			Team sport		
		Mean	Standard Deviation	Interpretation	Mean	Standard Deviation	Interpretation
Coping with adversity		3.16	0.61	Medium High	3.12	0.53	Medium High
Coachability		2.57	0.51	Medium Low	2.53	0.42	Medium Low
Concentration		3.01	0.54	Medium High	3.01	0.49	Medium High
Confidence & Achievement		3.22	0.58	Medium High	3.20	0.48	Medium High
Motivation							
Goal Setting & Mental Preparation		3.24	0.59	Medium High	3.22	0.51	Medium High
Peaking Under Pressure		2.81	0.69	Medium Low	2.76	0.65	Medium Low
Freedom From Worry		2.89	0.74	Medium Low	2.98	0.71	Medium Low
Overall subscale		2.98	0.42	Medium Low	2.97	0.34	Medium Low

Medium-level coping skills in both team and individual sports are supported by research indicating the importance of psychological flexibility, optimal stress and arousal levels for peak performance, and the need to balance engagement with mental health and well-being. Empirical studies in sports psychology often highlight the adaptive nature of coping strategies and their relationship with performance outcomes, team dynamics, and individual psychological well-being. By maintaining coping skills at a medium level, athletes can navigate the demands of their sport effectively, promoting not only peak performance but also long-term engagement and psychological health. This approach aligns with contemporary

psychological theories, such as the stress and coping model (Lazarus & Folkman's, 1984) further developed by Wolfers and Schneider (2021), highlights the dynamic and context-specific aspects of coping mechanisms.

In team sports, coping skills often involve interpersonal elements, such as seeking and providing support among teammates. Medium-level coping skills in this context encourage positive team dynamics and cohesion without over-reliance on others, which could undermine individual responsibility and autonomy. Team sports require athletes to sometimes adapt to different roles and responsibilities. Medium-level coping skills allow athletes to navigate these changes without the stress of perfectionism or fear of failure, promoting team adaptability and individual growth within the team structure. In individual sports, athletes often rely more heavily on internal coping mechanisms. Medium-level coping skills ensure that these athletes can manage stress and anxiety without over-dependence on internal control strategies, which can lead to isolation or excessive self-criticism. Athletes in individual sports bear the sole responsibility for their performance. Medium-level coping skills help manage this pressure, enabling athletes to engage in constructive self-evaluation and growth without succumbing to the paralysing effects of perfectionism or fear of failure.

Athlete Satisfaction

Satisfaction is divided into three subscales: a coach, team efficiency, and contentment with the team. Based on the result shown in Table 3, the coach subscale ($M=4.11$) is a high interpretation in individual sports compared to team sports ($M=3.99$) in medium-high interpretation. To determine motivation and satisfaction, the SDT emphasizes the significance of autonomy, competence, and relatedness. In individual sports, the direct coach-athlete relationship may better fulfil these psychological needs for coaches, leading to higher satisfaction. In contrast, the complexities and shared responsibilities in team sports may make these needs more challenging to satisfy fully, moderating satisfaction levels. Additionally, research on attribution theory in sports can provide insights into how coaches perceive their influence on performance outcomes.

In individual sports, the clear link between coaching and outcomes supports internal attributions of success, enhancing satisfaction. In team sports, the external factors and collective nature of performance may lead to more external attributions, slightly reducing the sense of personal achievement and satisfaction. Empirical studies in sports psychology could investigate these phenomena by examining coaches' perceived autonomy, competence, and relatedness in different sports contexts, as well as their attributions of success and failure. Such research would contribute to a deeper understanding of the factors influencing coach satisfaction across various sports settings. Then, team performance ($M=3.87$) is almost the same between individual sports and team sports which is their interpretation is medium-high.

Theoretically, the Group Cohesion Theory Carron et al (1998) in sports psychology highlights the importance of unity and togetherness in achieving collective goals, which is relevant for understanding satisfaction in both team and individual sports. The theory suggests that a strong sense of cohesion, whether in the context of a team or a training group, can significantly enhance satisfaction levels. Furthermore, Social Identity Theory, proposed by Tajfel & Turner in 2004, posits that people get some of their self-worth from the organisations they are members of. Regarding sports, this means that athletes can experience satisfaction from the successes of their team or training group, as these successes contribute to their social identity. Empirical research could explore these dynamics by examining how team athletes' sports perceive their contributions to and the successes of their respective teams or training

groups. Such studies could provide insights into the mechanisms through which collective aspects of sport contribute to individual satisfaction, highlighting the complex interplay between personal achievements and team or group dynamics.

The satisfaction with the team ($M=4.09$) is almost the same between individual sports and team sports with the interpretation being high. Theoretical frameworks such as SDT and Maslow's Hierarchy of Needs provide a basis for understanding these phenomena. When it comes to promoting motivation and satisfaction, SDT stresses the significance of relatedness, competence, and autonomy. Being part of a team, whether in an individual or team sport, can satisfy the need for relatedness and contribute to feelings of competence through shared achievements. Maslow's hierarchy further supports this by positioning belonging and esteem needs as critical for psychological well-being. Teams can offer a sense of community and recognition that satisfies these needs, leading to higher satisfaction levels. Empirical research in sports psychology can explore these aspects by examining how team cohesion, social support, and shared goals influence satisfaction levels in both individual and team sports. Such studies can provide insights into the mechanisms through which team involvement contributes to athlete satisfaction, highlighting the importance of social and psychological factors in the athletic experience.

As a whole, the mean score of all subscales of athlete satisfaction ($M=4.02$) in individual sports is higher than in team sports ($M=3.94$). So, the interpretation of individual sports is high while the interpretation of team sports is medium-high. The SDT is particularly relevant in explaining the differences in satisfaction levels. According to SDT, the three most important factors in promoting happiness and fulfillment are autonomy, competence, and relatedness. In individual sports, the autonomy and competence needs may be more directly fulfilled due to the clear connection between personal effort and outcomes. In contrast, in team sports, the need for relatedness might be more prominent, but the fulfillment of autonomy and competence needs can be more complex due to the collective nature of the sport. Additionally, Attribution Theory (Heider, 1958) can provide insights into how athletes perceive the causes of their successes or failures. In individual sports, athletes are more likely to make internal attributions for their performance, which can enhance feelings of satisfaction when they perform well. In team sports, the attributions can be more external or distributed among teammates, which might not provide the same level of satisfaction. Empirical research in sports psychology can further elucidate these dynamics by examining how individual and team athletes perceive their autonomy, competence, and relatedness in their sporting environments, and how these perceptions relate to their overall satisfaction. Expanding our knowledge of the psychological underpinnings of athlete satisfaction across different sports contexts.

Table 3

Descriptive Analysis of Satisfaction

Satisfaction subscale	Individual sport			Team sport		
	Mean	Standard Deviation	Interpretation	Mean	Standard Deviation	Interpretation
Coach	4.11	0.61	High	3.99	0.60	Medium High
Team Performance	3.87	0.72	Medium High	3.79	0.71	Medium High
Satisfaction with Team	4.09	0.77	High	4.02	0.76	High
Overall subscale	4.02	0.63	High	3.94	0.61	Medium High

Athlete Success

Based on the result shown in Table 4, the Matriculation student-athlete's perception of success was at high levels. Success in sports is a complex construct that extends beyond winning competitions; it encompasses personal development, mastery of skills, achievement of goals, and the quality of the sports experience. SDT states that a person's motivation and well-being are enhanced when their requirements for autonomy, competence, and relatedness are met. In sports contexts, athletes in both individual and team sports who meet these psychological needs through personal achievements or team affiliations likely perceive a high level of success. Achievement Goal Theory distinguishes between ego-oriented and task-oriented objectives (Nicholls, 1984). Athletes who concentrate on achieving objectives (e.g., mastering a skill) may perceive high success levels in both individual and team sports by focusing on personal improvement and team development, rather than just winning.

Social Identity Theory suggests that individuals obtain a portion of their self-esteem from their membership in particular groups. In team sports, the success of the group can enhance individual members' self-esteem and perception of success. This can also apply to individual sports, where athletes often identify with larger entities like clubs or national teams. Athletes' sense of success is impacted by a myriad of factors, including individual accomplishments, team dynamics, social support, and the satisfaction of psychological needs, according to empirical studies in sports psychology. Investigating these factors through qualitative and quantitative studies can provide deeper insights into how athletes in different sports contexts conceptualize and experience success.

Table 4

Descriptive Analysis of Success

Success subscale	Individual sport			Team sport		
	Mean	Standard Deviation	Interpretation	Mean	Standard Deviation	Interpretation
Flow State	4.39	0.65	High	4.41	0.65	High
Attention	4.64	0.82	High	4.61	0.67	High
Technique	4.63	0.81	High	4.64	0.72	High
Sensitivity to Error	4.80	0.76	High	4.67	0.61	High
Commitment	5.18	0.73	High	5.21	0.61	High
Achievement	4.69	0.80	High	4.68	0.71	High
Overall subscale	4.72	0.66	High	4.70	0.54	High

H_{01} There is no significant difference in athletes' coping skills between individual and team sports.

Table 5 showed the significance threshold is $p > 0.05$. Therefore, hypothesis 1 (H_{01}) is accepted. As a result, Matriculation student-athletes' coping skills do not change much between individual and team sports.

Table 5

Differences Analysis in Athletes' Coping Skills Between Individual and Team Sport

	Category	N	M	SD	t	df	p
Coping with adversity	Individual	117	3.16	0.61	0.55	312	0.59
	Team	197	3.12	0.53			
Coachability	Individual	117	2.57	0.51	0.75	312	0.46
	Team	197	2.53	0.42			
Concentration	Individual	117	3.01	0.54	-0.55	312	0.96
	Team	197	3.01	0.49			
Confidence & Achievement	Individual	117	3.22	0.58	0.27	312	0.78
	Team	197	3.20	0.48			
Goal Setting & Mental	Individual	117	3.24	0.59	0.42	312	0.67
	Team	197	3.22	0.51			
Peaking Under Pressure	Individual	117	2.81	0.69	0.57	312	0.57
	Team	197	2.76	0.65			
Freedom From Worry	Individual	117	2.89	0.74	-1.23	312	0.22
	Team	197	2.98	0.71			
Overall	Individual	117	2.98	0.42	0.19	312	0.85

$p < 0.05$ (2-tailed)

Managing internal and external pressures that are seen as demanding or beyond one's resources is the proposed process of coping according to theoretical frameworks like the can be applied universally to athletes in both individual and team sports, suggesting that the fundamental nature of coping processes can be similar across different sports contexts. Empirical evidence supporting the similarity in coping skills across sports types can be derived from comparative studies that examine the coping strategies employed by athletes in various sports settings. Such studies could investigate the types of stressors encountered, how various coping strategies are seen to work, and how this influences overall performance and well-being. In conclusion, while individual and team sports may present unique challenges, the core coping skills employed by athletes can be similar due to the shared nature of competitive stressors and the universal psychological processes involved in coping with stress and pressure in sports.

H_{02} The coping skills and satisfaction of matriculation student-athletes are not significantly related.

Table 6 demonstrates a positive association between Matriculation student-athletes coping skills and satisfaction ($r=0.337$, $p < 0.01$). It shows that the correlation strength for both variables is modest. The p -value is less than 0.01, indicating a significant value. This leads us

to reject the null hypothesis (H_{02}). Athletic coping abilities and sports satisfaction are significantly related.

Table 6

Correlation Analysis Between Athletic Coping Skills and Satisfaction

		Satisfaction	Success
Coping Skills	Pearson Correlation	0.377**	0.594**
	Sig. (2-tailed)	0.000	0.000
	N	314	314

**Significant level $p < 0.01$ (2-tailed)

Stress and Coping Theory posits that the way individuals appraise and cope with stressors significantly influences their emotional well-being and satisfaction. In the athletic domain, effective coping skills can help athletes manage competitive stress, leading to higher satisfaction with their performance and sporting experience. According to SDT, well-being and satisfaction are enhanced when the fundamental psychological requirements of autonomy, competence, and relatedness are satisfied. Coping skills that help athletes feel more competent in managing stressors and more autonomous in their decision-making can enhance their overall satisfaction. The significant relationship between athletic coping skills and satisfaction can be justified by considering the multifaceted role of coping in the athletic experience.

Coping skills not only help athletes manage the immediate stresses and pressures of competition but also contribute to broader aspects of their sporting journey, including performance, psychological well-being, resilience, and goal achievement. The moderate strength of the correlation suggests that while coping skills are an important factor in determining satisfaction, they are one of many contributing elements, consistent with the complex and dynamic nature of athletic experiences. Future research could further explore this relationship by examining specific types of coping strategies and their differential impacts on satisfaction, as well as potential moderating variables such as the level of competition, sport type, and individual athlete characteristics.

H_{03} The coping skills and sports success of matriculation student-athletes are not significantly related.

Table 6 also demonstrates a positive correlation between Matriculation student-athletes coping skills and achievement ($r=0.594$, $p < 0.01$). It indicates that the strength of the correlation between the two variables is moderate. The limit of significance is below 0.01 ($p < 0.01$). Hypothesis 3 (H_{03}) is therefore refuted. Athletic coping abilities and sporting achievement are significantly related. This finding was supported by Kirkbir & Zengin (2021) where there is a strong relationship between students' sports achievement and their coping mechanisms ($p < 0.01$, $B = 0.59$). Therefore, it can be concluded that the more athletic coping strategies increase, the greater their athletic success. Stress and Coping Theory highlights the process of appraising and managing stressors. Effective coping can transform potential stress into a motivational force, driving athletes towards success. Referring to Self-Determination Theory, coping skills that support autonomy, competence, and relatedness can enhance intrinsic motivation, leading to improved performance and sports success. Empirical research

supports the connection between coping skills and sports success. Athletes that use adaptive coping methods including problem-focused coping and seeking social support tend to attain better performance levels and enjoy more success in their sports careers, as shown by studies.

The correlation coefficient of 0.594 indicates a strong relationship, suggesting that coping skills are a significant predictor of sports success. However, it is also important to note that sports success is a multifactorial outcome influenced by physical, technical, tactical, and psychological factors. Coping skills represent a crucial psychological component that interacts with these other factors to influence overall success. Further research could explore the specific coping strategies most predictive of success in various sports, how coping skills interact with other determinants of success and the most effective ways to develop these skills in athletes across different age groups and levels of competition.

***H₀₄* The Matriculation student-athletes coping skills do not significantly affect their satisfaction.**

Table 7, the predictor variables are contributing to changes in criterion variables. Data analysis shows that the correlation between criterion variables and the linear combination between 2 predictor variables is 0.377. The value of R^2 satisfaction is 0.142 ($\beta=0.377$, $t=7.186$, $p<0.001$), which shows that 14.2% of changes in the criterion variable (satisfaction) are due to a combination of the predictor variable (coping skills). Around 85.8% of changes in criterion variables cannot be predicted and it might be influenced by other factors that have not been measured in this study. This gap points to the potential involvement of other variables not accounted for in this study, such as social support, personality traits, intrinsic motivation, or even external factors like coaching quality and team dynamics. So, coping skills are the predictor variables that influence the Matriculation student-athlete's satisfaction. Thus, null hypothesis 4 (H_{04}) is rejected.

The results provide many directions for further investigation. Future research should investigate more psychological variables and their relationship with coping abilities to have a more thorough grasp of the factors influencing pleasure in athletes. Studying the impact of traits like grit, resilience, and emotional intelligence might provide significant insights. Furthermore, longitudinal studies monitoring improvements in coping skills and contentment over time might establish causation and the enduring effects of these factors on athletes' careers. This study might pinpoint crucial stages or changes in an athlete's career when coping abilities have the most substantial impact on satisfaction. Additionally, a qualitative study investigating athletes' personal experiences and narratives might enhance our comprehension of the quantitative results. Conducting in-depth interviews or focus groups might provide detailed insights into how athletes interpret and use coping methods, and how these tactics impact their pleasure and well-being.

Finally, experimental designs including treatments to improve coping skills might provide concrete proof of the cause-and-effect relationship between coping methods and satisfaction and performance. The research might determine the most efficient coping mechanisms for various sports, competition levels, and individual athlete requirements. This study has shown the connection between coping abilities and satisfaction in athletes and suggests the need for further research into the psychological aspects of sports. Comprehending the many aspects that influence an athlete's contentment and performance is essential for creating specific therapies that enhance athletes' mental health and maximise their performance.

Table 7

Regression Analysis of Athletes' Coping Skills on Satisfaction

Variable	R ²	B	β	F	t	p
Satisfaction	0.142	2.115	0.377	51.645	7.186	<0.001

H₀₅ The Matriculation student-athletes coping skills do not significantly affect their sports. The result shows in Table 8, that the predictor variables are contributing to changes in criterion variables. Data analysis shows that the correlation between criterion variables and the linear combination between 2 predictor variables is 0.594. The value of R square success is 0.353 ($\beta=0.594$, $t=13.051$, $p<0.001$), which shows that 35.3% of changes in the criterion variable (success) are due to a combination of the predictor variable (coping skills). Around 64.7% of changes in criterion variables cannot be predicted and it might be influenced by other factors that have not been measured in this study. This substantial percentage points towards the multifaceted nature of sports success, which likely encompasses physical attributes, technical skills, tactical understanding, external support systems, and possibly even environmental and situational factors not captured in the current study. So, coping skills are the predictor variables that influence the athlete's success. Thus, the null hypothesis (H_{05}) is rejected. The coping abilities of Matriculation student-athletes have a considerable impact on their sporting achievement.

Future studies could incorporate a wider range of psychological, physical, and environmental factors to gain a more holistic understanding of what contributes to athletic success. Including variables such as mental toughness, physical fitness levels, coaching quality, team dynamics, and even competitive anxiety could provide a more comprehensive picture. Implementing longitudinal research designs could help clarify the development of coping skills over time and their long-term impact on success. This approach would also allow for the examination of how the relationship between coping skills and success might evolve with an athlete's age, experience level, and career stage. Investigating the role of coping skills across different sports, levels of competition, and cultural contexts could offer insights into how these relationships might vary across different sporting environments. This could also include comparing individual vs. team sports to explore how the dynamics of coping and success may differ. Utilising qualitative methods such as interviews and narrative analyses could enrich the quantitative findings, offering deeper insights into how athletes perceive and utilize their coping strategies in the pursuit of success. Designing and implementing interventions aimed at enhancing coping skills could provide causal evidence of their effect on athletic success. Such studies could also identify which specific coping strategies are most effective for improving performance outcomes in various sports contexts.

Table 8

Influence Between Athletes' Coping Skills On Sports Success

Variable	R ²	B	β	F	t	p
Sports Success	0.353	0.936	0.594	170.320	13.051	<0.001

Conclusion

The study's results show some interesting things about the Matriculation student-athletes psychological. The coping abilities of Matriculation student-athletes are not influenced by the kind of sport they participate in, whether individual or team-based. This makes the point that

coping strategies are the same across all sports. More importantly, the data shows a strong connection between how well players deal with stress and how satisfied and successful they are in sports. The connection ratings show that players are happier and more successful in their sports as their ability to deal with stress and problems grows. The strong beta values show that coping skills are very important for sports, not just as a link, but also as a main factor in their happiness and success. The strength of these relationships shows how psychological toughness and flexibility are just as important as physical strength and technical skills in determining a Matriculation student-athlete's satisfaction and success in sports.

Because of these results, it is very important for sports training programs to stress the development of strong coping mechanisms. Mental skills training and physical preparation should be done together by coaches and sports experts to make sure that players are ready for the mental demands of competition and the stresses that come with sports. Mindfulness, stress control, and visualisation are some of the techniques that Matriculation student-athletes should know how to use to meet the specific needs of their sport and daily life. To make things even better, personalised coping techniques should be made for each player, taking into account how they are different and how they can best use their psychological skills and weaknesses. This personalised method will not only help players do better and be happier, but it will also improve their health and strength, both on and off the pitch.

References

- Bhaskar, V. (2021). Comparison of the athletic coping skills of fide-rated tournament chess players in Kerala. *International Journal of Physical Education, Sports and Health*, 8(2), 41-44
- Brand, R., Wolff, W., & Thieme, D. (2014). Using response-time latencies to measure athletes' doping attitudes: the brief implicit attitude test identifies substance abuse in bodybuilders. *Substance Abuse Treatment, Prevention, and Policy*, 9(1). <https://doi.org/10.1186/1747-597x-9-36>
- Caliskan, G., & Baydar, O. H. (2016). Satisfaction Scale For Athlete (SSA): A Study Of Validity And Reliability. *European Scientific Journal*, ESJ, 12(14), 13. <https://doi.org/10.19044/esj.2016.v12n14p13>
- Carron, A. V., Brawley, L. R., & Widmeyer, W. N. (1998). The measurement of cohesiveness in sports groups. In *Advances in sport and exercise psychology measurement*. <http://ci.nii.ac.jp/ncid/BA40413145>
- Christino, M. A., Coene, R. P., O'Neil, M., Daley, M., Williams, K., Ackerman, K. E., Kramer, D. E., & Stracciolini, A. (2021). Sport Specialization, Athletic Identity, And Coping Strategies in Young Athletes. *Orthopaedic Journal of Sports Medicine*, 9(7_suppl3). <https://doi.org/10.1177/2325967121s00111>
- Cosma, G., Chiracu, A., Stepan, R., Cosma, A., Nanu, C., & Păunescu, C. (2020). Impact of coping strategies on sports performance. *Journal of Physical Education and Sport*, 20(3), 1380-1385.
- Doron, J., & Martinent, G. (2016). Appraisal, coping, emotion, and performance during elite fencing matches: a random coefficient regression model approach. *Scandinavian Journal of Medicine & Science in Sports*, 27(9), 1015–1025. <https://doi.org/10.1111/sms.12711>
- Dugdale, J. R., Eklund, R. C., & Gordon, S. (2002). Appraisal, Coping, and Performance. *The Sport Psychologist*, 16, 20-33.

- Fry, M. D., Hogue, C. M., Iwasaki, S., & Solomon, G. B. (2021). The relationship between the perceived motivational climate in elite collegiate sport and athlete psychological coping skills. *Journal of Clinical Sport Psychology, 15*(4), 334–350. <https://doi.org/10.1123/jcsp.2020-0002>
- Gaudreau, P., & Blondin, J. (2002). Development of a questionnaire for the assessment of coping strategies employed by athletes in competitive sport settings. *Psychology of Sport and Exercise (Online), 3*(1), 1–34. [https://doi.org/10.1016/s1469-0292\(01\)00017-6](https://doi.org/10.1016/s1469-0292(01)00017-6)
- Gaudreau, P., Nicholls, A. R., & Levy, A. R. (2010). The Ups and Downs of Coping and Sport Achievement: An Episodic Process Analysis of Within-Person Associations. *Journal of Sport & Exercise Psychology (Print), 32*(3), 298–311. <https://doi.org/10.1123/jsep.32.3.298>
- Heider, F. (1958). The psychology of interpersonal relations. In *John Wiley & Sons, Inc. eBooks*. <https://doi.org/10.1037/10628-000>
- Kirkbir, F., & Zengin, S. (2021). The Role of Athletic Self-Confidence and Coping Strategies in Predicting the Athletic Success of Trabzon University Athletic students. *Shanlax International Journal of Arts, Science and Humanities (Online), 9*(2), 122–129. <https://doi.org/10.34293/sijash.v9i2.4298>
- Lazarus, R. S., & Folkman, S. (1984). Coping and adaptation. In *The handbook of behavioral medicine*. Nueva York: Guilford.
- Lazarus, R. S. (2000). How emotions influence performance in competitive sports. *Sport Psychologist, 14*(3), 229–252. <https://doi.org/10.1123/tsp.14.3.229>
- Lazarus, R. S., & Folkman, S. (2013). Stress: appraisal and coping. In *Springer eBooks* (pp. 1913–1915). https://doi.org/10.1007/978-1-4419-1005-9_215
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality (Print), 1*(3), 141–169. <https://doi.org/10.1002/per.2410010304>
- Litwic-Kamińska, K. (2020). Types of Cognitive Appraisal and Undertaken Coping Strategies during Sport Competitions. *International Journal of Environmental Research and Public Health, 17*(18), 6522. <https://doi.org/10.3390/ijerph17186522>
- Martens, R. (1990). Competitive anxiety in sport. *Choice (Chicago, Ill.), 28*(01), 28–0355. <https://doi.org/10.5860/choice.28-0355>
- Maslow, A. H. (1943). A theory of human motivation. *Psychol. Rev.* 50, 370–396. doi: 10.1037/h0054346
- Mousavi, S. A., & Vaez Mousavi, M. K. (2015). Introducing the sports success scale. *Motor Behavior, 19*, 123-142.
- Nicholls, A. R., Levy, A. R., Carson, F., Thompson, M. A., & Perry, J. L. (2016). The applicability of self-regulation theories in sport: Goal adjustment capacities, stress appraisals, coping, and well-being among athletes. *Psychology of Sport and Exercise, 27*, 47–55. <https://doi.org/10.1016/j.psychsport.2016.07.011>
- Rice, S., Purcell, R., De Silva, S., Mawren, D., McGorry, P. D., & Parker, A. G. (2016). The Mental Health of Elite Athletes: A Narrative Systematic Review. *Sports Medicine, 46*(9), 1333–1353. <https://doi.org/10.1007/s40279-016-0492-2>
- Russo, M. J., Kaňevsky, A., Salvat, F., Helou, B., Lamaletto, L., Marinangeli, A., Allegri, R., & Sevlever, G. (2024). 3.29 The relationship among athletic coping skills, depressive symptoms and post-concussion symptoms in rugby union players. *British Journal of Sports Medicine*. <https://doi.org/10.1136/bjsports-2023-concussion.245>

- Ryan, R. M., & Deci, E. L. (2017). Self-Determination Theory: Basic psychological needs in motivation, development, and wellness. In *Guilford Press eBooks*. <https://doi.org/10.1521/978.14625/28806>
- Tajfel, H., & Turner, J. (2004). The Social Identity Theory of Intergroup Behavior. In *Psychology Press eBooks* (pp. 276–293). <https://doi.org/10.4324/9780203505984-16>
- Tomé-Lourido, D., Arce, C., Valés-Vázquez, Á., & Fernández, D. V. (2019). Assessing the use of psychological skills by sports category and the relation with sports performance satisfaction. *Journal of Sports Medicine and Physical Fitness*, 59(6). <https://doi.org/10.23736/s0022-4707.18.08410-4>
- Townsend, T. K., Coene, R. P., Williams, K., Pluhar, E., Ackerman, K. E., Kramer, D. E., Stracciolini, A., & Christino, M. A. (2022). Assessment of coping skills in Pediatric sports medicine patients. *Orthopaedic Journal of Sports Medicine*, 10(5_suppl2), 2325967121S0042. <https://doi.org/10.1177/2325967121s00428>
- Lee, U., & Yoo, H. (2023). Effect of psychological skill training on mood states, sports performance strategy, sports coping skills, and sports confidence in cyclist. *Koching Neunglyeog Gae'balji*, 25(1), 178–186. <https://doi.org/10.47684/jcd.2023.01.25.1.178>
- Whitehead, S., & Owen, C. (2022). Netball. In Winter, E., Jones, A. M., Davison, R. C. R., Bromley, P. D., & Mercer, T. (2006). *Sport and Exercise Physiology Testing Guidelines: Volume I - Sport testing*. In *Routledge eBooks*. <https://doi.org/10.4324/9780203966846>
- Wolfers, L. N., & Schneider, F. M. (2021). Using media for coping: A scoping review. *Communication Research*, 48(8), 1210-1234.