



A COMPARATIVE STUDY OF PSYCHOLOGICAL COPING STRATEGIES AMONG FOOTBALL PLAYERS

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Abstract

This study intends to examine the Sri Lanka and Pakistan football players' fitness level and coping strategies. Current study compares football players' psychological coping mechanisms. The different tests will be conducted and the Survey method will be used for the appropriate outcome. It can be helpful for football players, football clubs, Pakistan and Sri Lanka Football Federation. Quantitative research with a non-probability convenient sampling technique is used for this study. Different tests related to Fitness are conducted for psychosocial coping mechanisms, standard questionnaires were used. This kind of research allows one to quantify information and extrapolate results from the sample to the whole population. After obtaining the data, the researcher analyzed data and it is concluded that, the physical fitness level of Sri Lankan football players is much better than Pakistani football players. This has a direct effect on their psychological coping strategies of Sri Lankan football players. Because the psychological coping strategies of Sri Lankan football players are much better than the psychological coping strategies of Pakistani football players. The result of the current study proves that if football players have good physical fitness levels, then a good physical fitness have significant positive effects on psychological coping strategies of football players.

Key Words: Psychological- Body Mass Index (BMI)- Strength- Endurance- Speed- Flexibility- Cardiovascular Fitness- Stress- Anxiety- Depression- Coping Strategies.

1. Introduction

Coping strategies are activities that assist athletes in adapting to difficult situations, maintaining psychological balance, and increasing psychological reliability (Tanveer, M. et al., 2022). There are three types of coping strategies: appraisal-focused (adaptive cognitive), problem-focused (adaptive behavioral), and emotion-focused. People typically use two of these three methods, namely problem-focused and emotion-focused, to cope with stress (Roy, N. et al., 2022). Coping strategies can help individuals find the best method for managing their stress (Tanveer, M. et al., 2024). Sport

performance is influenced by a variety of factors, some of which are intimately linked to the athlete, whether hereditary or acquired, while others impact the athlete and the team collectively, affecting the training and competition process. When assessing activity and performance in a team athletic population, athletes' performance can be measured by various metrics such as speed, time, weight lifted, length, height, acceleration, distances covered, heart rate responses, and heart rate recovery. Stress can cause deviations from their usual performance, prompting the need for effective coping methods to improve performance during competition, often evaluated based on previous performances (Rogaleva et al., 2019).

As a normal part of life, the human body always experiences stress and reacts to it physically, mentally, and emotionally. The appropriate level of stress can keep a person positively motivated and help maintain physical and mental health (Tanveer, M. et al., 2022). However, frequent high-level or prolonged stress without relief can lead to stress-related tension, resulting in distress (Roy, N. et al., 2022). Distress is a negative stress reaction that can manifest in emotional problems such as worry, severe anxiety, tension, frustration, and depression, as well as physical symptoms like headaches, stomach upset, chest pain, elevated blood pressure, sleep disturbances, sexual dysfunction, and even increase the risk of developing diseases such as cancer, heart disease, lung ailments, and liver disease, and even suicide (Yaribeygi H, et al., 2017). In attempts to relieve stress, some individuals may compulsively turn to substances like food, alcohol, tobacco, and drugs, or engage in behaviors such as gambling and sex (Tanveer, M. et al., 2024). However, rather than alleviating stress, these substances and habits often exacerbate stress or worsen it, leading to higher oxidative stress, an increased risk of developing metabolic syndrome, and a higher body mass index (Tanveer, M. et al., 2022).

Participating in competitive sports places football players, especially those at the development stage, under intense physical and psychological demands. These rigorous challenges necessitate players to not only utilize automated technical and tactical skills but also to develop and employ a range of cognitive and behavioral coping strategies to achieve performance success and satisfaction (Crocker, Alderman, & Smith, 1988; Gould, Finch, & Jackson, 1993). The investigation of how football players cope with sport-related stress is recognized for its practical and theoretical importance (Crocker, Kowalski, & Graham, 1998). Sport researchers have begun to identify how athletes cope or believe they would cope under varying sport-related conditions (Crocker, 1992; Crocker & Graham, 1995; Gould, Eklund, et al., 1993; Madden, 1990). These studies have reported how athletes cope not only with match-related demands but also with managing time, interpersonal relationships, media, injury, and finances. However, there remains a gap in the study of psychological coping strategies among football players in Pakistan and Sri Lanka. This research aims to address this gap and provide evidence and suggestions to contribute to the development of sports in Pakistan. The chosen area of study may help determine if there are significant differences between Sri Lankan and Pakistani football players in competitive sports at the mastery stage, thereby enriching psychological and pedagogical research theoretically in this area within the country.

The objective of this study was to determine whether there are significant differences in performance resulting from the use of psychological coping strategies among Pakistani and Sri Lankan football players. Specifically, the study aimed to identify any tangible variations in the performance of players as a result of employing psychological coping strategies. Additionally, the research sought to explore how enhancing confidence and achievement motivation among Pakistani and Sri Lankan football players could be facilitated through the implementation of specific coping plans to deal with adversity.

2. Methodology

2.1. Study Design, Setting and Participants

The goal of the study was to investigate football players' psychological coping mechanisms, focusing on players from Sri Lanka and Pakistan. A quantitative research design was deemed appropriate for this study, as it allows for the quantification of information and the extrapolation of results from the sample to the entire population. Quantitative analysis is crucial for comparing football players' coping

mechanisms, as it provides numerical data that can be statistically analyzed to draw meaningful conclusions. This approach enables researchers to assess the prevalence and effectiveness of coping strategies across different groups of football players.

The study spanned two years, from 2021 to 2022, during which all testing procedures were conducted. A standard questionnaire was administered to Pakistani and Sri Lankan football players to conduct psychosocial analysis. The research targeted a population of 500 individuals from specific cities, comprising football players participating in national and international competitions. From this population, a sample of 200 football players, aged between 24 and 30 years, was selected—100 from Pakistan and 100 from Sri Lanka. These participants represented both national and international levels of competition. The analytical process involved the use of various variables, including mean, standard deviation, frequency, and percentage scale. The tests, scales, and relevant references employed in data collection are detailed below.

2.2 Instruments for the Study (Athletic Coping Skill Inventory scale)

The ACSI-28 (Smith, Schultz, Smoll, & Placek, 1995) was employed to assess the psychological coping abilities of each athlete. This self-report questionnaire utilizes both exploratory and confirmatory factor analysis. The instrument consists of a 28-item scale designed to evaluate seven categories of psychological coping skills specific to sports. These categories include overcoming adversity, achieving peak performance under pressure, goal setting and mental preparation, focus, freedom from worry, confidence and achievement motivation, and coachability. Respondents rated the frequency of encountering each statement on a 4-point scale, ranging from "0" (almost never) to "3" (almost regularly). The internal consistency of the subscales was found to be satisfactory, with alpha levels ranging from 0.62 to 0.78 and a total scale alpha of 0.86 (Smith, Smoll, & Placek, 1995).

2.3 Data collection and analysis

The methodology employed for data collection and analysis in this research study involved comparing the psychological coping strategies utilized by football players. A quantitative research approach was utilized to quantify the data, employing a non-probabilistic sampling technique to ensure accurate and objective evaluation. Criteria were established for participant selection, resulting in a sample of 200 football players aged 24 to 30 competing at national and international levels from Sri Lanka and Pakistan. Physical characteristics such as weight and height were measured using appropriate scales, while physical fitness was assessed through various tests including the 35-meter sprint race, standing broad jump test, wall-toss test, sit-and-reach test, hexagon test, and the 12-minute football player race test. Psychological aspects were examined using the Athletic Coping Skill Inventory questionnaire. Data analysis was conducted using Microsoft Excel 2016 for initial data organization and IBM SPSS v.26 Statistical Analysis software for in-depth statistical analysis. Statistical significance was determined using $p < 0.05$.

3. Results

The **table 1** presents the demographic characteristics of the participants from Sri Lanka and Pakistan. The mean age of the Sri Lankan participants was 25 years with a standard deviation of ± 1.29 , while the Pakistani participants had a mean age of 27 years with a standard deviation of ± 1.23 . In terms of height, the Sri Lankan participants had a mean height of 5.01 feet (± 0.85), whereas the Pakistani participants had a mean height of 5.11 feet (± 0.15). Regarding weight, the mean weight of the Sri Lankan participants was 52.10 kg (± 4.51), and for the Pakistani participants, it was 54.62 kg (± 4.01). The body mass index (BMI) of the Sri Lankan participants had a mean value of 20.31 (± 0.43), while the Pakistani participants had a mean BMI of 21.02 (± 0.85). Additionally, the mean duration of participation in sports was 3.50 years (± 1.25) for Sri Lankan participants and 4.51 years (± 1.49) for Pakistani participants. These findings provide insights into the demographic characteristics of the participants from both countries, which are essential for understanding the study population and interpreting the results effectively.

Table 1. Demographic details (mean ± standard deviation) of Sri Lankan and Pakistani participants including age, height, weight, BMI, and time in sports.

Demographic Details	Sri Lankan Participants	Pakistani Participants
	mean ± standard deviation	mean ± standard deviation
Age (years)	25 ± 1.29	27 ± 1.23
Height (Feet)	5.01 ± 0.85	5.11 ± 0.15
Weight (Kg)	52.10 ± 4.51	54.62 ± 4.01
Body Mass Index	20.31 ± 0.43	21.02 ± 0.85
Time in Sports (Years)	3.50 ± 1.25	4.51 ± 1.49

Table 2: the distribution of the 200 football players who participated in the study according to their playing positions.

Position	Playing Status			
	Sri Lankan Participants		Pakistani Participants	
	Frequency	Percentage	Frequency	Percentage
Defender.	28	28.0	42	42.0
Forward.	17	17.0	35	35.0
Goal Keeper.	15	15.0	08	08.0
Mid Fielder.	40	40.0	15	15.0
Total	100	100.0	100	100.0

Table 2 displays the distribution of the 200 football players who participated in the study according to their playing positions. In Sri Lanka, the most common playing position among the participants was Midfielder, with approximately 40 footballers occupying this role. On the other hand, in Pakistan, Defender emerged as the predominant playing position, with approximately 42 footballers fulfilling this role. This distribution provides insight into the composition of playing positions among the study participants from both countries, offering valuable information for analyzing the data and understanding any potential variations in psychological coping strategies across different roles on the football field.



Figure 1: Playing Status.

Figure 1 illustrates the distribution of playing positions among the participants from Pakistan and Sri Lanka. In the bar chart, the main representative playing position is the Defender, comprising 42% of the players from Pakistan and 40% from Sri Lanka. Additionally, Forward players accounted for 35% of the Pakistani participants and 17% of the Sri Lankan participants. Midfielders constituted 15% of the Pakistani players and 40% of the Sri Lankan players. Moreover, Goalkeepers represented 15% of the Sri Lankan players and only 8% of the Pakistani players. These findings provide a visual representation of the distribution of playing positions among the football players in the study, highlighting the variations between Pakistan and Sri Lanka.

Table 3: Fitness Test Results of physical fitness test.

Fitness Test	Sri Lankan Participants			Pakistani Participants			Overall Participants			
	N	Mean	±S.D	N	Mean	±S.D	N	Mean	±S.D	P-value
35-M Sprint Race.	100	26.1	6.62	100	21.31	5.71	200	28.5	6.81	0.000
Standing Broad Jump.	100	27.0	5.01	100	32.81	5.02	200	24.6	4.40	0.010
Wall Toss Test.	100	22.5	17.9	100	2.14	19.0	200	23.1	17.5	0.020
Sit and Reach Test.	100	5.7	1.60	100	6.12	1.12	200	4.9	2.21	0.000
Hexagon Test.	100	20.9	36.4	100	23.2	44.3	200	21.3	30.1	0.010
12-Minutes Race.	100	26.10	6.69	100	32.43	5.38	200	27.5	5.81	0.000

In the **Table 3**, the mean and standard deviation of each physical fitness test for both Sri Lankan and Pakistani football players. The "Overall" column provides the mean and standard deviation across all participants. Additionally, the "P-Value" row indicates the statistical significance of any differences observed between Sri Lankan and Pakistani players in each fitness test.

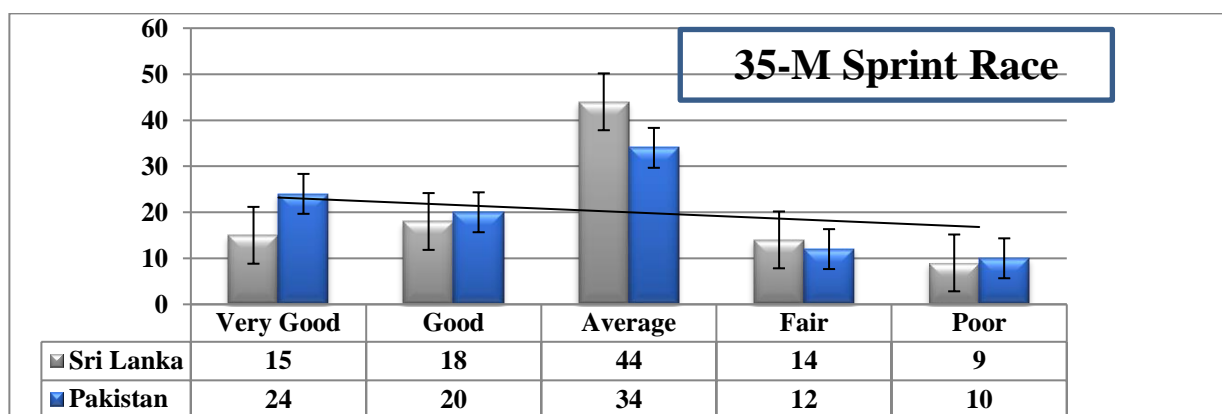


Figure 2: 35-M Sprint Race

35-M Sprint race Test was conducted from 200 football players of Sri Lanka and Pakistan. There is no missing player in standing broad jump. So, based on analysis the researcher says convincingly that 34% of Pakistani and 44% Sri Lankan football players belong to Average strength level. 18% Sri Lanka and 20% Pakistani was score Good regarding 35-M Sprint race Test collective results to fitness test of football players. It represents source of failure for the football players according to this study (Figure 2). The detail distribution of mean SD and P-Value of players according to individual items can be seen in (Table 3).

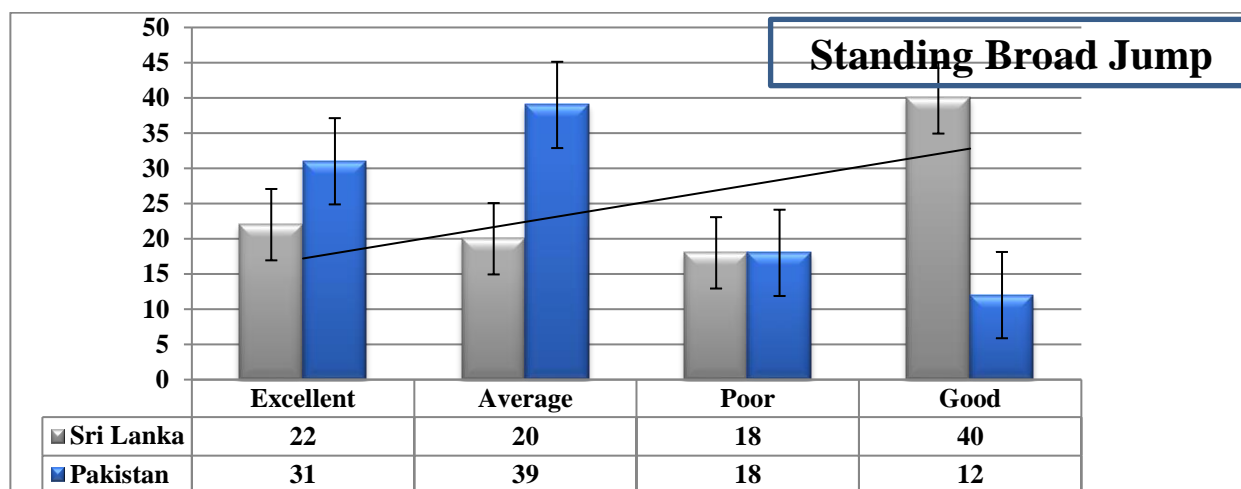


Figure 3: Standing Broad Jump

Standing Broad Jump Test was conducted from 200 football players of Sri Lanka and Pakistan. There is no missing player in standing broad jump. So, based on analysis the researcher says convincingly that 39% of Pakistani and 20% Sri Lankan football players belong to Average strength level. 40% Sri

Lanka and 12% Pakistani was score Good regarding standing broad jump collective results to fitness test of football players. It represents source of failure for the football players according to this study (Figure 3). The detail distribution of mean SD and P-Value of players according to individual items can be seen in (Table 3).

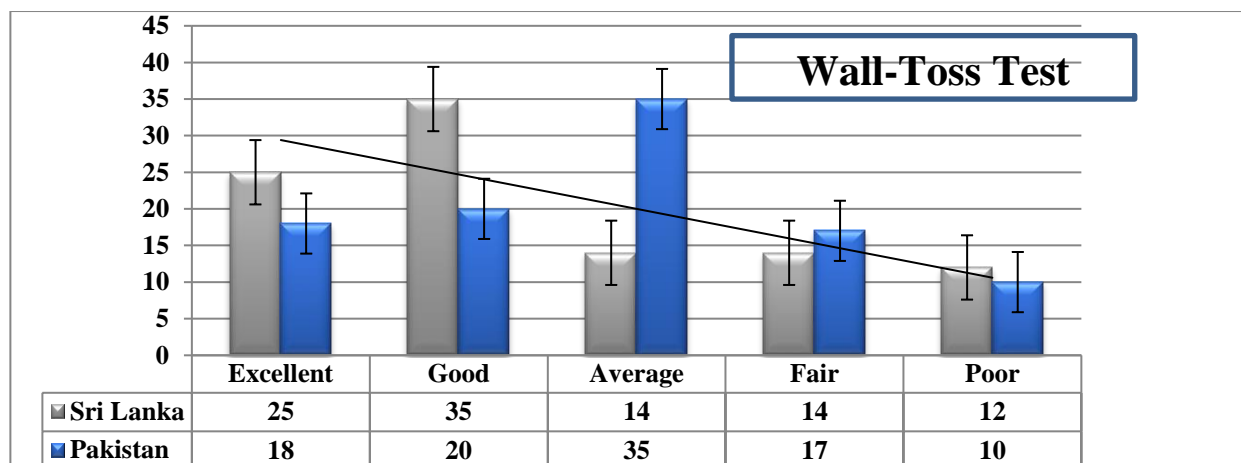


Figure 4: Wall-Toss Test

Wall-Toss test was conducted from 200 football players of Sri Lanka and Pakistan. There is no missing player in standing broad jump. So, based on analysis the researcher says convincingly that 35% of Pakistani and 14% Sri Lankan football players belong to Average strength level. 35% Sri Lanka and 20% Pakistani was score Good regarding standing broad jump collective results to fitness test of football players. It represents source of failure for the football players according to this study (Figure 4). The detail distribution of mean SD and P-Value of players according to individual items can be seen in (Table 3).

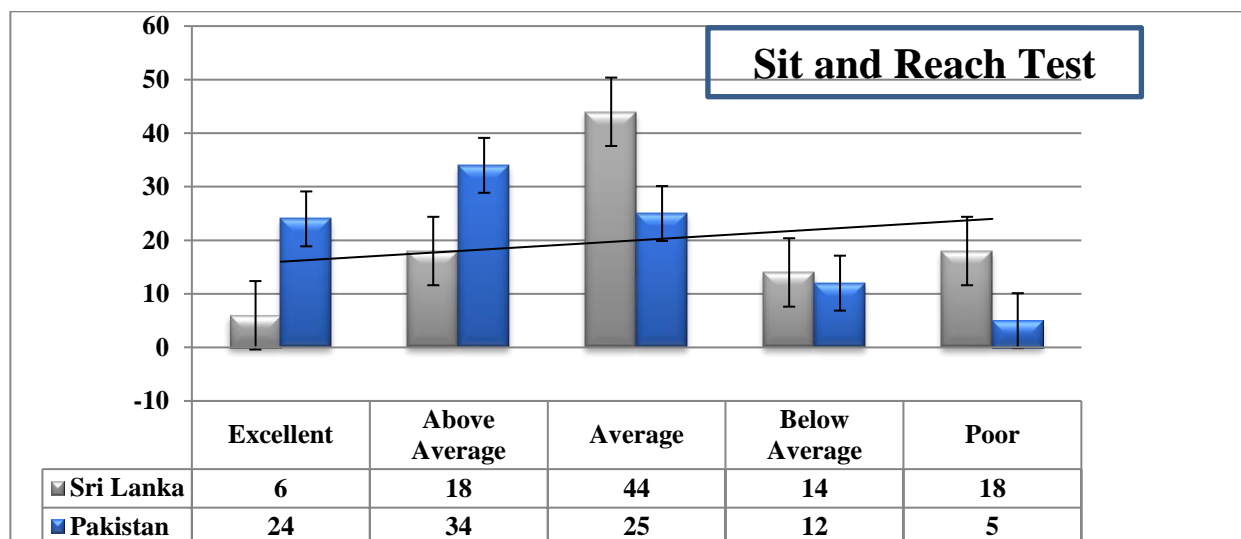


Figure 5: Sit and Reach Test

Sit and reach test was conducted from 200 football players of Sri Lanka and Pakistan. There is no missing player in sit and reach test So, based on analysis the researcher says convincingly that 25% of Pakistani and 44% Sri Lankan football players belong to Average strength level. 18% Sri Lanka and 34% Pakistani was score above average regarding standing broad jump collective results to fitness test of football players. It represents source of failure for the football players according to this study (Figure 5). The detail distribution of mean SD and P-Value of players according to individual items can be seen in (Table 3).

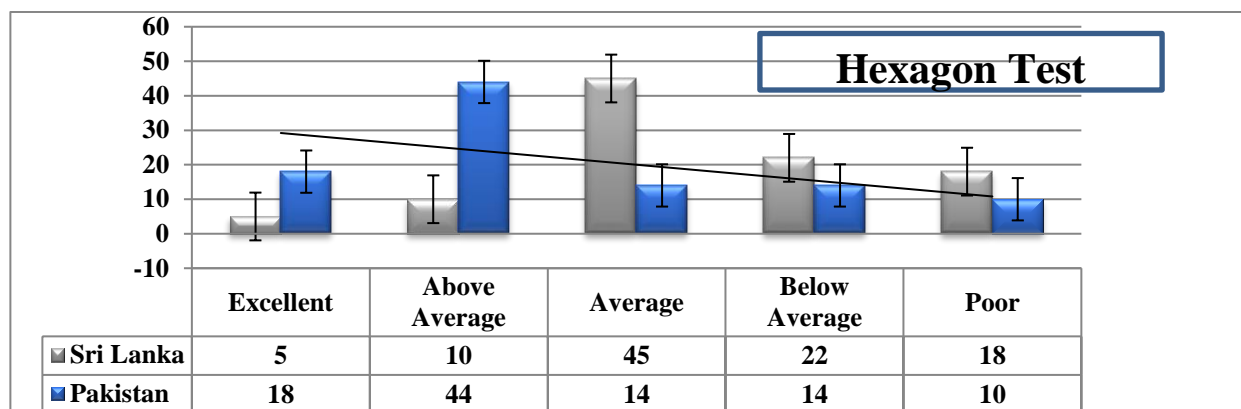


Figure 6: Hexagon Test

Hexagon test was conducted from 200 football players of Sri Lanka and Pakistan. There is no missing player in sit and reach test So, based on analysis the researcher says convincingly that 14% of Pakistani and 45% Sri Lankan football players belong to Average level. 10% Sri Lanka and 44% Pakistani was score above average regarding Hexagon test collective results to fitness test of football players. It represents source of failure for the football players according to this study (Figure 6). The detail distribution of mean SD and P-Value of players according to individual items can be seen in (Table 3).

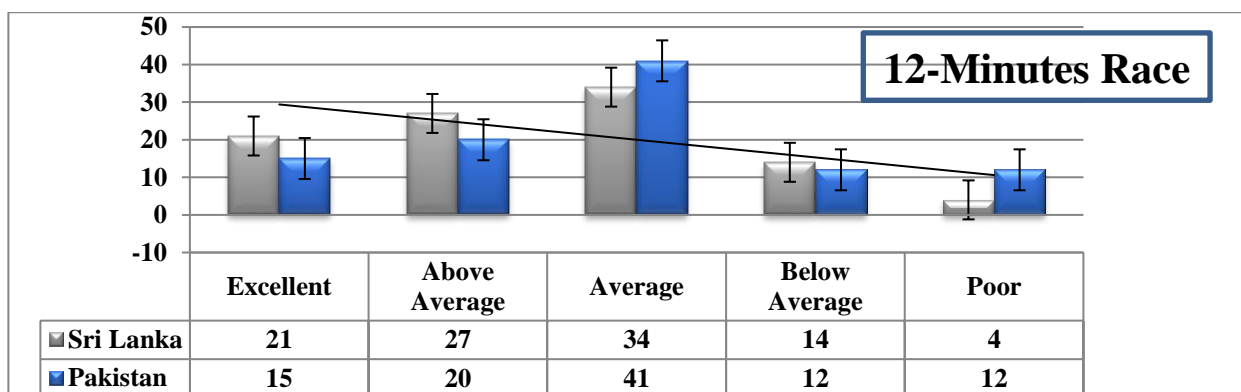


Figure 7: 12-Minutes Race

12-Minutes test was conducted from 200 football players of Sri Lanka and Pakistan. There is no missing player in 12-Minutes test so, based on analysis the researcher says convincingly that 41% of Pakistani and 34% Sri Lankan football players belong to Average strength level. 27% Sri Lanka and 20% Pakistani was score above average regarding 12-Minutes collective results to fitness test of football players. It represents source of failure for the football players according to this study (Figure 7). The detail distribution of mean SD and P-Value of players according to individual items can be seen in (Table 3).

Table 4: Athletic Coping Skills Inventory Results

ACSI	Sri Lankan Participants			Pakistani Participants			Overall Participants			P-value
	N	Mean	±S.D	N	mean	±S.D	N	mean	±S.D	
Coping with Adversity.	100	1.81	0.78	100	2.07	0.51	200	2.74	0.97	0.000
Coach ability.	100	2.09	0.85	100	1.78	0.83	200	2.96	0.12	0.000
Concentration.	100	1.73	0.93	100	1.90	0.61	200	1.34	0.99	0.010
Confidence and Achievement Motivation.	100	2.04	0.98	100	1.70	0.14	200	1.90	0.15	0.010
Goal setting.	100	2.27	0.81	100	1.82	0.46	200	2.80	0.72	0.010
Peaking under Pressure.	100	2.03	0.91	100	1.73	0.30	200	2.46	0.76	0.020
Freedom from Worry.	100	2.03	0.72	100	1.93	0.94	200	2.90	0.15	0.040

Significant, $P < 0.05$

A Comparative Study of Psychological Coping Strategies among Football Players and above table to find out the possible coping skills and shows the results of Athletic Coping Skills Inventory Questionnaire in which the overall mean, \pm SD and P-value of coping with adversity, coach ability, concentration, confidence and achievement, peaking under pressure, freedom from worry of the participants (N=200) were 2.76 ± 0.97 $p < 0.00$, 2.96 ± 0.12 $p < 0.00$, 1.34 ± 0.99 $p < 0.01$, 1.90 ± 0.15 $p < 0.01$, 2.80 ± 0.72 $p < 0.01$, 2.46 ± 0.76 $p < 0.02$, 2.90 ± 0.15 $p < 0.04$ with respectively. There is significant positive difference between Sri Lankan and Pakistani participants.

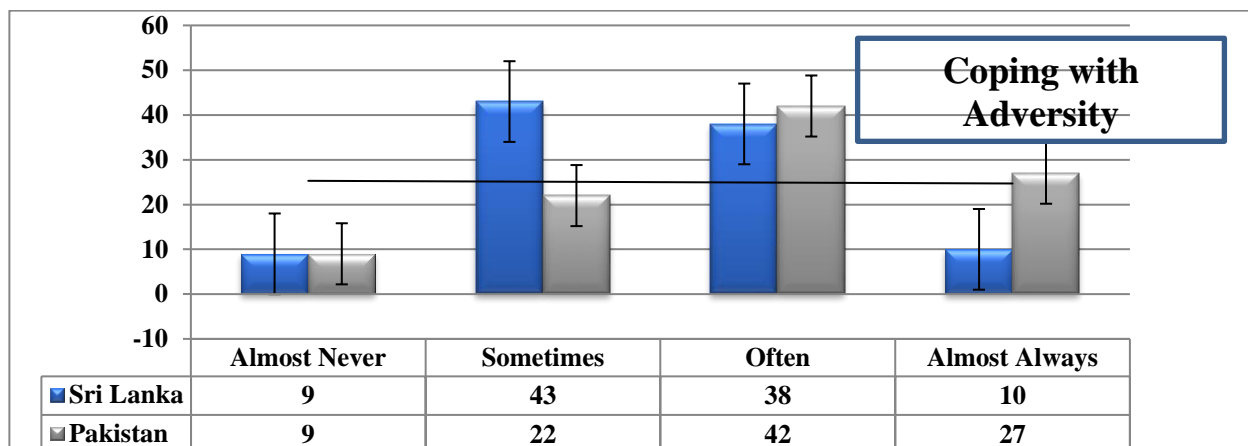
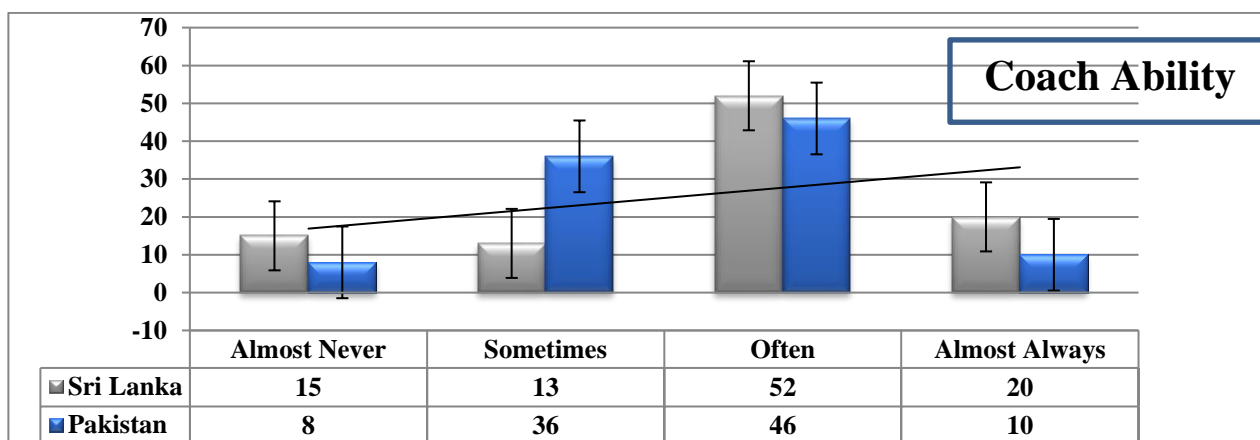


Figure 8: Coping with Adversity 43% Sri Lanka and 22% Pakistani was score is sometimes regarding coping with adversity collective results to coping strategies improve skills of football players (Figure 8). The detail distribution of frequency of players according to individual items can be seen in (Table 4).



52% Sri Lanka and 46% Pakistani was score often regarding coach ability collective results to coping strategies improve skills of football players (Figure 9). The detail distribution of frequency of players according to individual items can be seen in (Table 4).

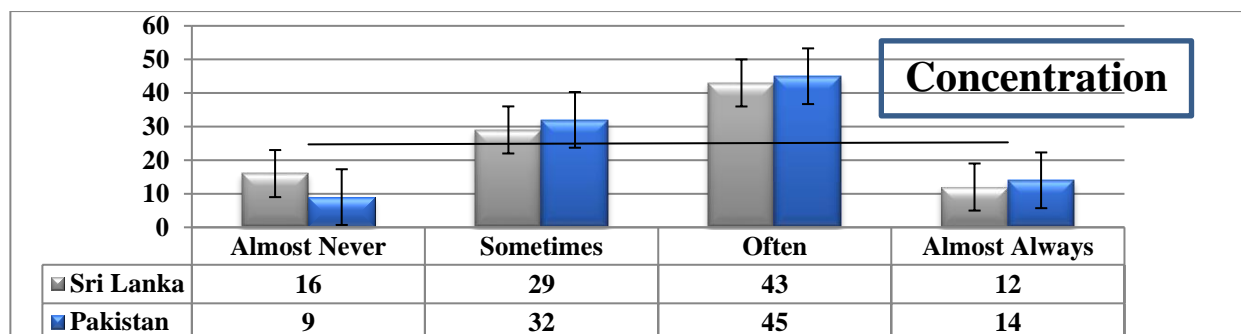


Figure 10: Concentration

43% Sri Lanka and 45% Pakistani was score often regarding concentration collective results to coping strategies improve skills of football players (Figure 10). The detail distribution of frequency of players according to individual items can be seen in (Table 4).

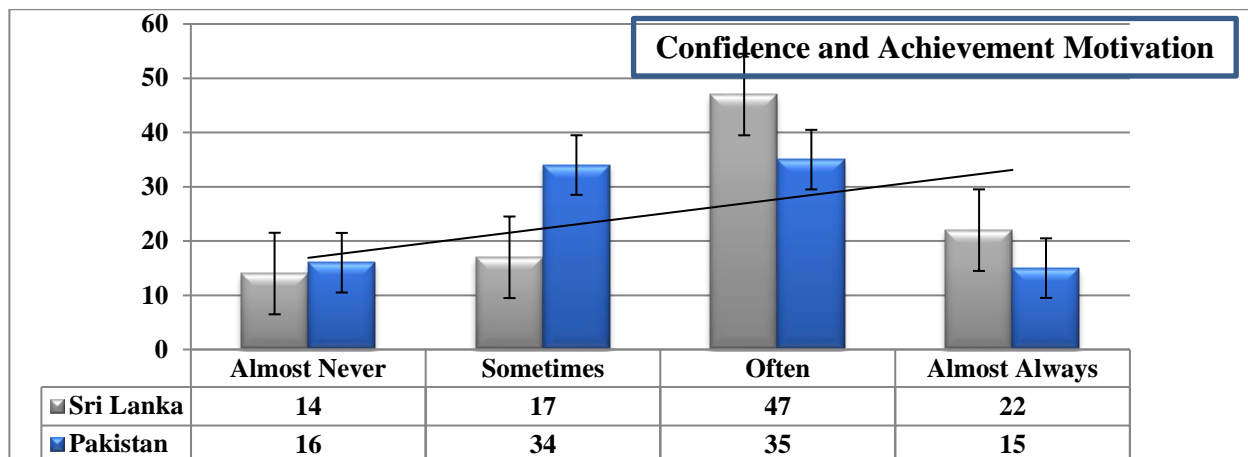


Figure 11: Confidence and Achievement Motivation

47% Sri Lanka and 35% Pakistani was score often regarding confidence and achievement motivation collective results to coping strategies improve skills of football players (Figure 11). The detail distribution of frequency of players according to individual items can be seen in (Table 4).

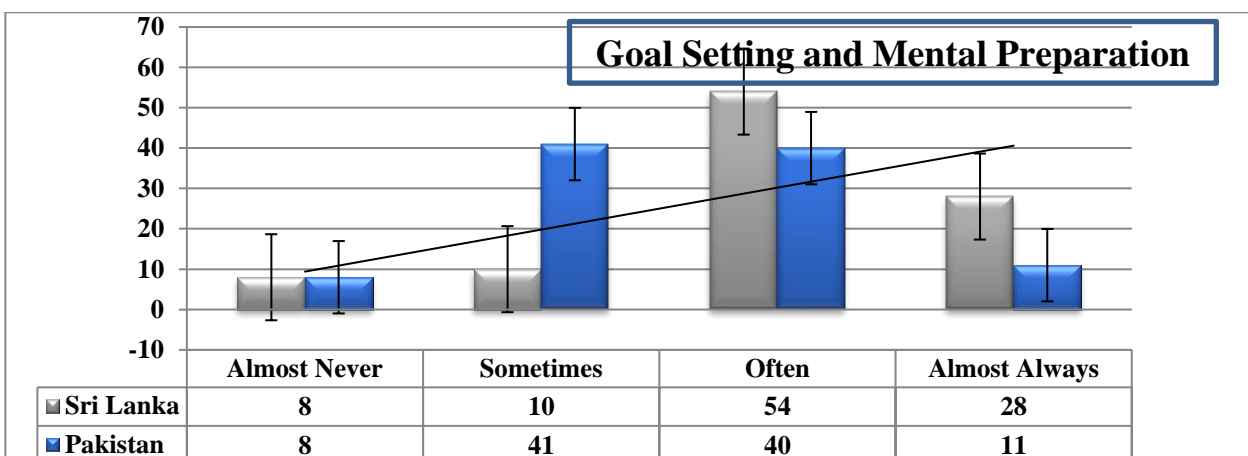


Figure 12: Goal Setting and Mental Preparation

54% Sri Lanka and 40% Pakistani was score often regarding goal setting and mental preparation collective results to coping strategies improve skills of football players (Figure 12). The detail distribution of frequency of players according to individual items can be seen in (Table 4).

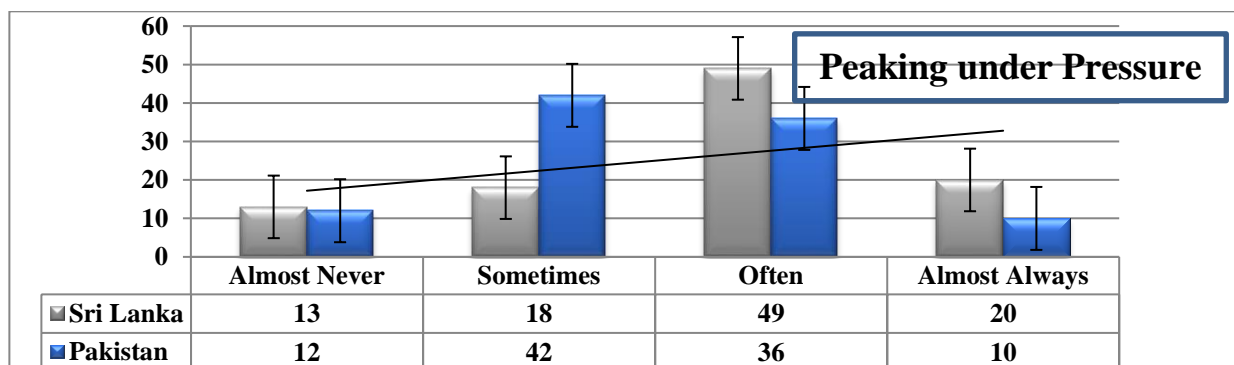


Figure 13: Peaking under Pressure

49% Sri Lanka and 36% Pakistani was score often regarding peaking under pressure collective results to coping strategies improve skills of football players (Figure 13). The detail distribution of frequency of players according to individual items can be seen in (Table 4).

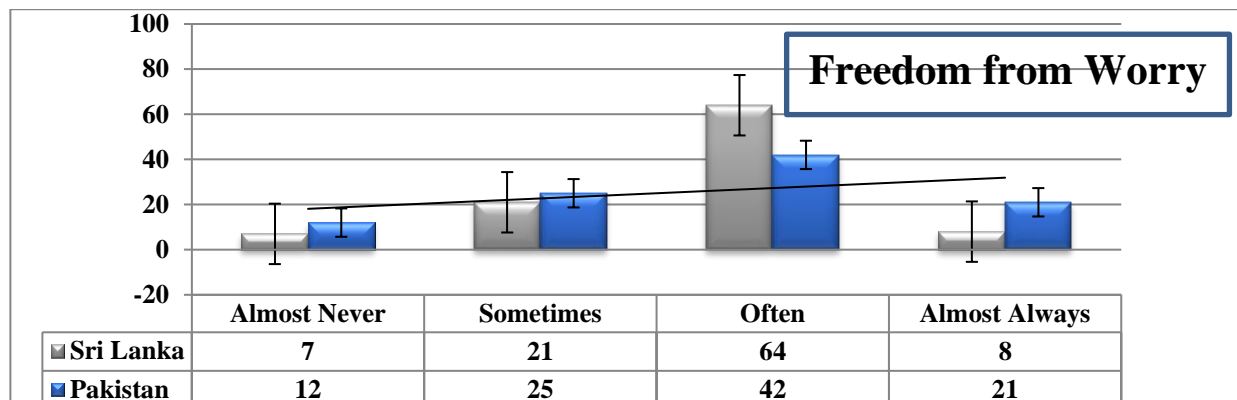


Figure 14: Freedom from Worry

64% Sri Lanka and 42% Pakistani was score often regarding freedom from worry collective results to coping strategies improve skills of football players (Figure 14). The detail distribution of frequency of players according to individual items can be seen in (Table 4).

4. Discussion

The findings of this study shed light on the significant role of psychological coping strategies in the performance of football players from Pakistan and Sri Lanka. By examining the differences in coping mechanisms and their impact on performance, this research aimed to contribute to a deeper understanding of how athletes manage stress and adversity in competitive sports settings.

Our study confirmed the hypothesis that the utilization of psychological coping strategies is associated with variations in performance among football players. Specifically, we observed that enhancing confidence and achievement motivation through specific coping plans can positively influence performance outcomes. These findings align with previous research indicating that athletes who perceive themselves as autonomous tend to employ approach-based coping mechanisms such as active planning, cognitive restructuring, emotional composure, and seeking social support (Kim & Duda, 1997; Romero et al., 2010; and Roy, N. et al., 2022).

Furthermore, our study highlighted the importance of perceived autonomy in coping processes. Athletes who actively identify with their actions and perceive control over their circumstances are more likely to utilize adaptive coping strategies effectively. This suggests that promoting a sense of agency and participation in the learning process can enhance athletes' ability to manage stress and adversity in sports.

Overall, the results of this study contribute valuable insights into the psychological factors influencing athletes' performance and well-being. By recognizing the importance of psychological coping strategies and autonomy in sports, coaches and sports psychologists can develop targeted interventions to support athletes in maximizing their potential and achieving success on the field.

5. Conclusion

In conclusion, the analysis of the data reveals a notable disparity in the physical fitness levels between Sri Lankan and Pakistani football players, with the former exhibiting superior physical fitness. This discrepancy extends to their psychological coping strategies, with Sri Lankan football players demonstrating higher levels of psychological coping abilities compared to their Pakistani counterparts. The findings underscore the significant positive impact of good physical fitness on the psychological coping strategies of football players. This suggests that efforts to enhance the physical fitness of football players could yield substantial benefits in bolstering their psychological resilience and coping mechanisms.

Acknowledgments

The authors gratefully acknowledge the University of Karachi Institutional Ethics Committee for authorizing the study, and extend their appreciation to the Sri Lankan and Pakistani football players who participated in the research. Permission to conduct the study was obtained from the relevant authorities, and all participants were informed that their involvement was voluntary. Prior to data collection, verbal informed consent was obtained from all participants, and verbal positive assent was confirmed. The data were collected and processed anonymously to ensure confidentiality and privacy.

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Authors' contributions

The study was planned and implemented by T.A, and B.A. T.A, B.A, and S.M.Z; drafted the manuscript; E.A provided intellectual guidance in improving the manuscript; T.A, B.A, E.A, S.M.Z, and M.T assisted in revising the manuscript. T.A, E.A. and M.T. edited the final version of the manuscript; all authors reviewed and approved the final revised manuscript and agree on the authors' presentation order.

Data Availability Statement

The corresponding author can provide the data used in this work upon request.

Competing interests

The authors have declared they have no competing interests.

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