



RESEARCH PAPER

Influence of Prosocial Behaviors, Mindfulness, and Perceived Prejudice on Team Cohesion among Women University Football Players in Punjab, Pakistan

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ABSTRACT

The purpose of this study is to investigate the direct relationships of prosocial behaviors, mindfulness, and perceived prejudice with team cohesion among women university football players in Punjab, Pakistan, drawing on social learning theory. Team cohesion is a fundamental element in competitive sports, especially women's football, where social and cognitive factors strongly influence team performance and success. While prosocial behaviors and mindfulness strengthen cohesion, aggression shows mixed effects, and prejudice undermines unity. In this study, the total population consisted 857 of women football players actively involved in university level football teams. A cross-sectional research design was employed, and data were collected from 373 active women football players at public universities in Punjab through purposive sampling. Constructs were measured using validated scales, and the data were analyzed using SPSS-26 and Smart-PLS software. The findings reveal friendship quality (FQ→TC: $\beta = 0.099$, $t > 1.207$) and perceived prejudice (PP→TC: $\beta = -0.022$, $t > 0.251$) do not demonstrate a significant direct relationship with team cohesion. However, agreeableness, (AG→TC: $\beta = 0.170$, $t < 4.903$), self-transcendence (ST→TC: $\beta = 0.598$, $t < 6.374$), empathic concern (EC→TC: $\beta = 0.156$, $t < 2.215$), aggression (AGG→TC: $\beta = -0.259$, $t > 3.269$) and mindfulness (MF→TC: $\beta = 0.413$, $t < 4.496$), significantly and positively influence team cohesion. The outcomes showed that all the constructs used in this study are highly reliable and consistent as Cronbach Alpha's estimation is over the required level. This study extends the literature by emphasizing the focus on prosocial behaviors and mindfulness in fostering cohesion in women's football players. The results suggest that coaches, Sports management Officials and sports policymakers should encourage prosocial development, integrate mindfulness-based practices, and actively address perceived prejudice and socio-cultural challenges. These measures can help strengthen team cohesion and create more supportive environments for women football players, particularly in developing country contexts such as Pakistan.

KEYWORDS Friendship Quality, Prosocial, Mindfulness, Perceived Prejudice, Cohesion

Introduction

Team cohesion is a critical determinant of performance, motivation, and satisfaction in competitive sports, especially in women's football, where success depends on cooperation, trust, and collective identity (Cruz, Rincón, Medina, & Moya, 2025). Cohesion not only influences on-field performance but also shapes the overall sporting

experience, interpersonal relationships, and athletes' long-term engagement in sport. Although research has established the value of psychosocial factors in building cohesive teams, there is limited empirical evidence addressing women football players in South Asian contexts, particularly in Pakistan Zahn-Waxler & Radke-Yarrow, (1990), where gendered challenges and societal prejudice often shape athletes' experiences. Team cohesion refers to the strength of bonds between team members, the feeling of attraction between team members and the degree to which members concentrate their efforts to achieve collective goals (Grossman, Nolan, Rosch, Mazer, & Salas, 2022)

The prosocial behaviors emerge as central to fostering strong team dynamics. Prosocial behaviors encompass a range of positive interpersonal tendencies, including friendship quality, which nurtures the strength of social bonds between teammates, characterized by trust, support, mutual respect, and shared experiences (Berndt, 2002). Empathic concern in an athlete's ability to recognize, understand, and respond to a teammate's emotions with compassion, kindness, softheartedness and support, which strengthens understanding and emotional responsiveness (Eke, Adam, Kowalski, & Ferguson, 2020). Self-transcendence is a player's ability to look beyond personal interests and prioritize the collective goals of the team and which reflects values of shared growth and collective well-being (Papaioannou & Krommidas, 2021). Agreeableness is an athlete's tendency to be cooperative, empathetic, and team-oriented which foster positive interactions and reduce conflicts within a team (Reizer, Harel, & Ben-Shalom, 2023). Conversely, Aggression refers to goal-directed, intense behavior of players which can be either constructive or destructive, depending on intent and execution (Foley & Baz, 2021), while sometimes present in competitive settings, undermines prosocial interactions and may disrupt cohesion. Brisimis, Bebetos, & Krommidas, (2018), together, these behaviors provide an essential foundation for examining how athletes relate to one another and sustain collective unity. Alongside prosocial tendencies, Mindfulness is an athlete's ability to maintain present moment awareness with focus, clarity, and non-judgmental acceptance of thoughts and emotions. It enhance the concentration, emotional regulation, and resilience of players and allow the players to be adaptive towards pressure, improve decision-making, and performance (Longshore & McAlarnen, 2021). By contrast, Perceived prejudice is a player's awareness or experience of bias, discrimination, or negative judgments based on factors such as gender, race, or skill level. It can create psychological barriers and impact on performance by fostering distrust and social divisions among teammates (Brown, 2010). It's rooted in gender stereotypes, social inequities, and discriminatory attitudes toward women in sports, may erode trust and belonging, weakening the sense of cohesion. Despite their significance, the direct interplay of these psychosocial factors with team cohesion remains underexplored in women's university football in Punjab (Saeed, Gul, Tabassum, & Sultan, 2025). The present study therefore seeks to examine the relationship of prosocial behaviors, mindfulness, and perceived prejudice on team cohesion among women university football players in Punjab, Pakistan. By focusing on specific dimensions of prosocial behaviors, (Friendship quality, Agreeableness, Self- Transcendence, Empathic concern and Aggression). This study aims to offer deeper insights into how positive interpersonal traits and broader psychosocial mechanisms contribute to building stronger, more unified women's teams in the developing country context like Pakistan.

Literature Review

Football is the beautiful game has remained a truly global sport for decades while it often depicts regional competitiveness. While, Women are always discouraged from taking part in any physical activity in Pakistan, either traditional or mainstream (Ahmed

Laar, Perveen, & Ashraf, 2022). Cohesion of a team is a measure of how successfully a group works together and how intensely its members are engaged to the group. In addition, maintaining group cohesiveness is essential if you want to retain members of that group. Previous studies on team cohesiveness in sports have mostly concentrated on male athletes (Eys et al., 2015). At the top or professional level, however, women athletes have been virtually disregarded. The literature emphasizes investigating the influence of prosocial behaviors self-transcendence, aggression, friendship quality, agreeableness, and empathic concern in sports. Self-transcendence, aggression, friendship quality, agreeableness, and empathic concern are all components of prosocial behavior because they influence an individual's willingness to engage in selfless behaviors that benefit others (Henney & Hackett, 2019). Aggression, on the other hand, can either hinder or promote prosocial behavior depending on whether it is directed towards or away from others in a positive or negative manner (Veiga Simão et al., 2021). Friendship quality is a key component of prosocial behavior because individuals with strong social ties and positive relationships are more likely to engage in actions that benefit their friends (Alsarrani, Hunter, Dunne, & Garcia, 2022).

Moreover, agreeableness is positively correlated with prosocial behavior because individuals who are friendly, cooperative, and compassionate are more likely to act in ways that benefit teammates (Graziano & Tobin, 2013). Additionally, empathic concern is another key component of prosocial behavior as it involves the ability to understand and share the feelings and emotions of others (Eisenberg, 2006). Individuals who possess high levels of empathic concern are more likely to engage in prosocial behavior as they are motivated by their empathy towards others. Prosocial behavior in sports fosters strong team cohesion, trust, and cooperation, ultimately enhancing team performance. When athletes engage in behaviors such as helping, encouraging, and showing empathy toward teammates, they create a supportive environment that improves communication and reduces conflicts (Kavussanu & Stanger, 2017). The development of prosocial behavior is jointly determined by factors that can be broadly described as personal and environmental characteristics (Rajab, Haziyaniti, Rahim, & Ahmad).

Mindfulness enhances self-awareness, emotional regulation, and resilience, allowing players to manage stress and interact more effectively with teammates (Andres, 2025). Each player's mindfulness level varies due to different social backgrounds and psychological dispositions, it is possible that mindfulness alters how prosocial behaviors such as empathy or aggression manifest within team cohesion. Mindfulness training, a sustained attention focusing strategy that originated in the Buddhist contemplative tradition but that first got empirical study attention in cognitive behavior therapy, is a new method for enhancing concentration (Gibert, Planas, & Torrents, 2024). A moment to moment, non-judgmental attention to oneself and the outside world is a key component of mindfulness (Cruz, Rincón, Medina, & Moya, 2025). By encouraging acceptance rather than attempting to suppress or eliminate distracting thoughts and emotions, mindfulness training differs from other cognitive control approaches like thought suppression (Pettersen, Adolfsen, & Martinussen, 2022). Perceived prejudice is a player's awareness or experience of bias, discrimination, or negative judgments based on factors such as gender, race, or skill level. It can create psychological barriers and impact performance by fostering distrust and social divisions among teammates (Kite, Whitley Jr, & Wagner, 2022). When players perceive prejudice, their tendency to interpret interactions with teammates is intentionally offensive, thereby augmenting the aggressive behavior and weakening the relationship between team members. This study filled another gap in the literature by investigating the moderating effect of perceived prejudice on the relationship between prosocial behavior and team cohesion among

women football players (Fish & Syed, 2020). This study answered that a positive and significant effect of prosocial behavior on team cohesion can be negatively affected due to women football players' prejudice. The role of perceived prejudice in weakening trust and disrupting cohesion remains unexplored, despite its potential to undermine team unity.

Social learning theory is a theory of the learning process that proposes that new behaviors can be acquired by observing and imitating others (McLeod, 2011). It states that learning is a cognitive process that occurs in a social context and can occur purely through observation or direct instruction, even without motor reproduction or direct reinforcement (Firmansyah & Saepuloh, 2022). The Social Learning Theory, which serves as the overarching theoretical lens for understanding how prosocial behaviors influence team cohesion among women football players. Social Learning Theory posits that individuals learn and develop behaviors through observation, imitation, and social interaction within their environment. In the context of women football teams, players observe and model behaviors from teammates, coaches, and the broader team culture, which subsequently shapes their own prosocial behaviors and contributes to overall team cohesion.

Material and Methods

In this study, the total population consisted 857 of women football players actively involved in university level football teams. Appropriate sample size of 373 respondents can be determined by various techniques to conduct structural equation modeling Ramayah, Cheah, Chuah, Ting, & Memon, (2018). This study employed a cross-sectional survey design using a close-ended questionnaire to collect data from women football players. The survey approach was chosen as it effectively addresses the research objectives and enables data collection from a wide sample in a cost-efficient and time-effective manner (Mohamad et al., 2015). The primary data was collected from women football players registered for at least two years in HEC-recognized public universities across Punjab, Pakistan. This two-year minimum registration criterion ensures participants have adequate experience in team dynamics, competition participation, and situations requiring high team cohesion. This study employed a non-probability purposive sampling technique to collect the data. The purposive sampling technique is employed as the women football player is the only person who can answer related to her behavior, prejudice, mindfulness, and cohesion within the team. Research design is a strategy adopted to integrate various components of the study logically and coherently to address the specific research objectives adequately. A quantitative research approach was adopted as the most suitable method to achieve the objectives (Amaratunga, Baldry, Sarshar, & Newton, 2002). This approach allows for examining the direct influence of prosocial behaviors, mindfulness, and perceived prejudice on team cohesion. The constructs utilized in the research model were evaluated using a multi-item scale in this study. Survey Questionnaires were used to collect data from women football players who were part of the university football team (Rule & John, 2015). The primary goal of this study's questionnaire is to glean data on prosocial behavior, perceived prejudice, mindfulness, and team cohesion. Data were collected through a structured survey, with questionnaire items and used the five point likert scale to capture associations among the study variables (Awang, Afthanorhan, & Mamat, 2016). The analysis focused on bivariate relationships to investigate the direct links between variables (Mohamad, Sulaiman, Sern, & Salleh, 2015).

Results and Discussion

This study is using the SPSS-26 and Smart-PLS software to run the analysis, and this software can provide reliable results for a small sample size (Conway, 2016). So, this study checked the reliability values of all the constructs through Cronbach Alpha. All the construct of this study are showing the valid and reliable Cronbach Alpha value above 0.77. The Table 1.1 shows the details of number of items, and reliability of each construct.

Table 1
Construct Reliability and No. of Items

Scale	Original Items	Cronbach Alpha
Friendship quality	22	0.824
Empathic concern	09	0.838
Agreeableness	09	0.892
Aggression	09	0.767
Self-transcendence	15	0.787
Mindfulness	12	0.878
Perceived prejudice	17	0.752
Team cohesion	06	0.956

The reliability coefficient Cronbach alpha for friendship quality, empathic concern, agreeableness, aggression, self-transcendence, mindfulness, perceived prejudice, and team cohesion is provided. These outcomes showed that the scales utilized have high reliability as Cronbach Alpha's estimation is over the required level of 0.70 (Gliem & Gliem, 2003). So, this study indicate that all the constructs used in this study are highly reliable and consistent.

Direct Relationship

In this sub section, it investigates the direct relationship between the independent variables of friendship quality, agreeableness, self-transcendence, empathic concern, aggression, mindfulness and perceived prejudice and the dependent variable of team cohesion. This section provides the results of this study. The table 1.2. below shows the results of our analysis.

Table 2
Direct Path Analysis

Path	Co-efficient	T-value	P-value	Supported	R ²
FQ → TC	0.099	1.207	0.228	Non-Significant	0.561
AG → TC	0.170	4.903	0.000	Significant	
ST → TC	0.598	6.374	0.000	Significant	
EC → TC	0.156	2.215	0.027	Significant	
AGG → TC	-0.259	3.269	0.001	Significant	
MF → TC	0.413	4.496	0.000	Significant	
PP → TC	-0.022	0.251	0.892	Non-Significant	

Table 1.2. Shows the direct path analysis since it depicts the direct association between prosocial behaviors such as friendship quality, agreeableness, self-transcendence, empathic concern, aggression, mindfulness, perceived prejudice and team cohesion of women football players. The results of friendship quality and team cohesion (FQ → TC: $\beta = 0.099$, $t > 1.207$) demonstrated that friendship quality among women football players has no relationship with team cohesion. The co-efficient value also shows a small effect size of 0.09% on team cohesion. The results of agreeableness and team cohesion (AG → TC: $\beta = 0.170$, $t < 4.903$) reveal that agreeableness has a positive relationship with team cohesion. The co-efficient value also shows a small effect size of

0.17% on team cohesion. The results of self-transcendence and team cohesion ($ST \rightarrow TC$: $\beta = 0.598$, $t < 6.374$) indicate that self-transcendence has a positive relationship with team cohesion. In contrast, the co-efficient effect size of self-transcendence on team cohesion is 59.8%, which is large.

The results of Empathic concern and team cohesion ($EC \rightarrow TC$: $\beta = 0.156$, $t < 2.215$) indicate that Empathic concern has a positive relationship with team cohesion. The co-efficient effect size of Empathic concern on team cohesion is 15.6%, which is medium. The results of Aggression and team cohesion ($AGG \rightarrow TC$: $\beta = -0.259$, $t > 3.269$) demonstrated that aggression among women football players has a negative relationship with team cohesion. The co-efficient value also shows a normal effect size of 0.259% on team cohesion. The results of mindfulness and team cohesion ($MF \rightarrow TC$: $\beta = 0.413$, $t < 4.496$) indicate that mindfulness has a positive relationship with team cohesion. The co-efficient effect size of mindfulness on team cohesion is 41.3%, which is large. In addition, perceived prejudice has no relationship with team cohesion ($PP \rightarrow TC$: $\beta = -0.022$, $t > 0.251$).

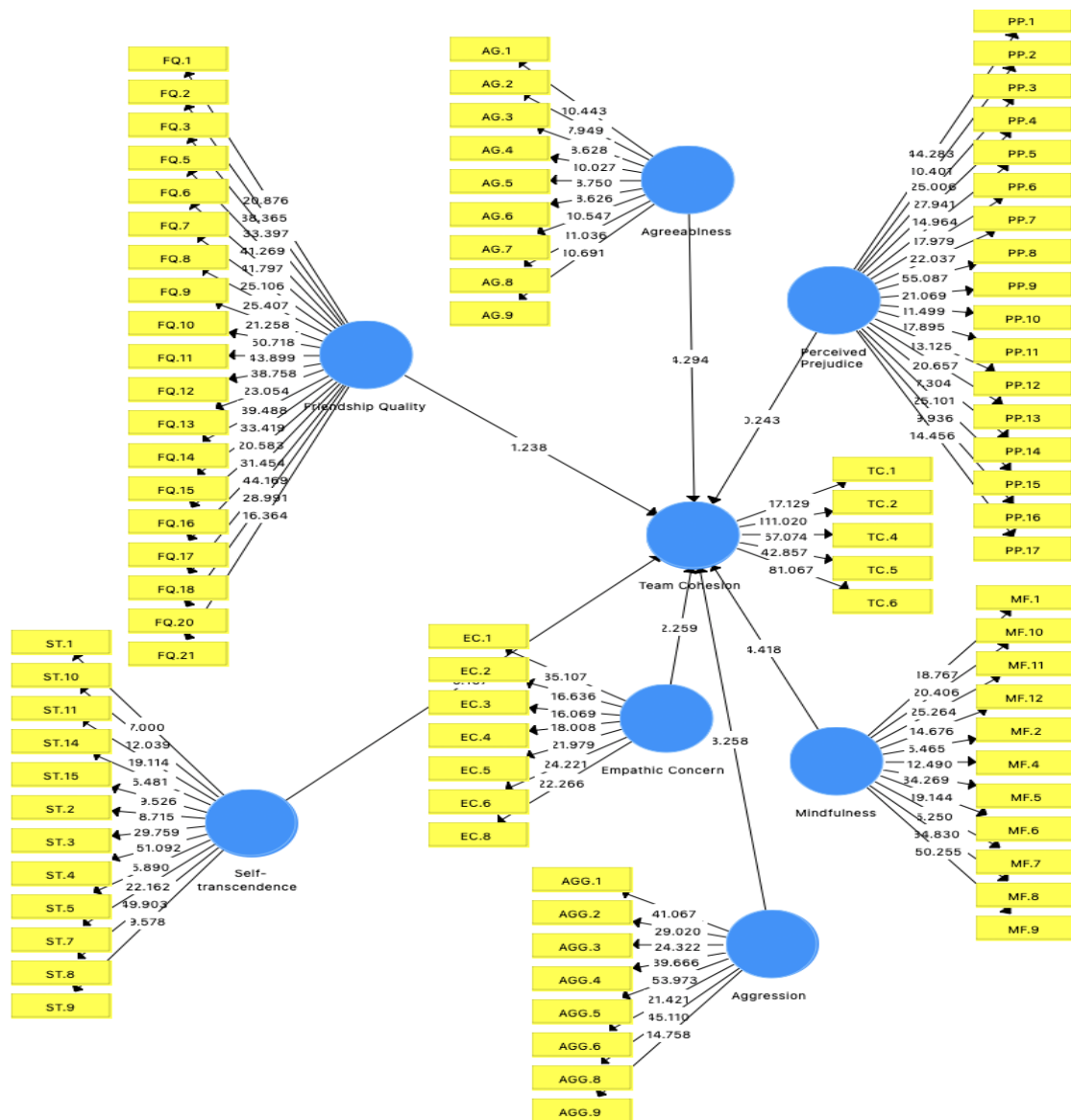


Figure 1 Direct Path Analysis

Figure 1 given above, shows the statistical framework of this study. This figure shows the direct path analysis of the relationship between the independent variable and dependent variables used in this study. This figure discloses the effect of agreeableness, friendship quality, self-transcendence, empathic concern, aggression, mindfulness and perceived prejudice on team cohesion.

Conclusion

In conclusion, this study highlights the direct relationship of prosocial behaviors; friendship quality, agreeableness, empathic concern, self-transcendence, aggression, mindfulness, and perceived prejudice on team cohesion among women football players in Pakistan. The findings emphasize the importance of fostering positive prosocial behaviors, encouraging mindfulness, and addressing socio-cultural challenges to strengthen team unity. Practically, the study suggests that coaches and policymakers should integrate prosocial development and mindfulness-based programs to create inclusive and supportive environments for women athletes.

Recommendations

Future research should include larger and more diverse samples, as well as longitudinal designs, to provide deeper insights into the factors influencing team cohesion in sports especially in football. Such approaches will strengthen the generalizability and reliability of findings. From a practical standpoint, this study highlights the importance of fostering collaboration, mutual respect, and inclusivity as key strategies to improve team cohesion and overall development of women's football in Pakistan.

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