

ROLE OF CHANGE OF COMPETITION VENUE ON UNIVERSITY PLAYER PERFORMANCE: AN EXPLORATORY STUDY



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Abstract: *Changes in competition venue represent a significant but understudied contextual variable in university sport performance in Pakistan. Away-venue competition exposes athletes to a range of psychological, physiological, and environmental stressors including competitive anxiety, reduced self-confidence, travel fatigue, unfamiliar playing surfaces, crowd pressure, and disrupted team coordination all of which may compromise performance outcomes. This exploratory, quantitative study investigated the role of competition venue change on university-level female athletes competing in Pakistan's inter-varsity sports championships during 2023–24. A purposive sample of 100 female players from universities across Pakistan was surveyed using an adapted 15-item Competitive State Anxiety Inventory-2 (CSAI-2) questionnaire (Martens, Vealey & Burton, 1990), administered 20 minutes prior to competition at the away venue. Data were analysed using Chi-Square tests via SPSS v.25, with all items yielding statistically significant results ($p < .001$). Findings revealed that a substantial proportion of players reported negative psychological and physiological effects when competing away from their home ground, including anxiety (42%), loss of self-confidence (33%), feelings of being powerless (40%), inability to coordinate with teammates (52%), fatigue (46%), reduced sense of safety (51%), and disheartening experiences (46%). Simultaneously, some players also reported heightened arousal responses at away venues, including greater excitement (53%), increased energy (43%), arrogance (51%), and aggression (42%). The study concludes that venue change exerts a significant and multidimensional influence on the psychological and physiological state of Pakistani university athletes, with negative effects predominating. Recommendations are made for institutional strategies to mitigate away-venue performance decrements, with implications for the Higher Education Commission of Pakistan (HEC) and inter-varsity sport administration.*

Keywords: Competition Venue, Home Advantage, University Athletes, Performance Anxiety, Pakistan, Inter-Varsity Sport, CSAI-2, Female Athletes

1. INTRODUCTION

1.1 Background

The physical environment in which athletic competition takes place is far from a neutral backdrop. A growing body of international literature attests that competition venue exerts a complex, multi-layered influence on athlete performance through psychological mechanisms such as anxiety, confidence, and arousal, as well as physiological pathways including fatigue, adaptation demands, and neuromuscular readiness (Martin et al., 2017; Weinberg & Gould, 2012). For university-level athletes, who typically lack the professional support infrastructure available to elite sports organizations, these venue-related stressors may be particularly acute.

In the Pakistani context, inter-varsity sports competitions organized under the auspices of the Higher Education Commission (HEC) bring together athletes from universities across provinces and regions, frequently requiring players to travel long distances to compete at unfamiliar venues. Despite the scale and institutional significance of HEC-sanctioned competitions, there is a conspicuous absence of empirical research examining how venue change affects the psychological and physiological readiness of Pakistani university athletes. While the broader home advantage phenomenon has been documented in sport science literature for over three decades (Courneya & Carron, 1992), its specific manifestations within Pakistan's university sport system remain unexplored.

The change of competition venue introduces a constellation of stressors: athletes must adapt to unfamiliar playing surfaces and spatial configurations, navigate psychological challenges arising from the absence of home crowd support, manage travel-related fatigue, and perform under potential hostility from opposing supporters. These demands may disrupt team coordination, trigger competitive anxiety,

undermine self-confidence, and reduce the precision and decision-making quality upon which athletic performance depends (Hill & Hemmings, 2015; Hanton et al., 2000; Reilly & Piercy, 2003). At the same time, away-venue contexts may also generate heightened arousal states in some athletes excitement, increased energy, and competitive aggression which can either facilitate or impair performance depending on the individual athlete's psychological profile and the demands of the sport (Jones & Swain, 1995; Ton et al., 2000).

University sport facilities themselves are increasingly recognized as performance-relevant environmental variables. Courneya and Carron (1992) proposed a conceptual framework linking game location, team and crowd factors, and performance outcomes that has guided subsequent research. The adequacy, familiarity, and atmosphere of a venue influence not only athlete psychology but also the logistical and strategic preparation of coaching teams. In Pakistan, disparities in facility quality between universities and between home and away contexts add further complexity to the venue-change performance relationship.

Despite these documented mechanisms and their potential operational relevance for university sport administration in Pakistan, no prior study has systematically explored how Pakistani female university athletes experience and respond to competition venue changes. The present study addresses this gap through an exploratory, quantitative investigation of female inter-varsity athletes' self-reported psychological and physiological responses to competing at away venues.

1.2 Objectives

The primary objective of this study was to measure the role of competition venue change on the performance-related

psychological and physiological states of Pakistani university-level female athletes competing in inter-varsity championships.

1.3 Significance

The study carries significance at multiple levels. For athletes and coaches, it provides empirical documentation of the specific dimensions of venue-related performance disruption, enabling more targeted psychological and tactical preparation for away competitions. For university sport administrators and HEC policymakers, the findings offer an evidence base for decisions regarding competition hosting, travel support, athlete welfare, and facility investment. The study also contributes to the emerging body of domestic sports science research in Pakistan, where applied investigations of contextual variables in university sport remain limited.

2. LITERATURE REVIEW

2.1 The Home Advantage Phenomenon

The home advantage the consistent finding that teams and athletes perform better when competing in their own venue compared to away venues is one of the most robust and extensively documented phenomena in sport science (Courneya & Carron, 1992). Across a wide range of sports and competitive levels, home teams win a disproportionate share of matches. Early taxonomic models proposed by Courneya and Carron (1992) attributed the home advantage to four primary factors: crowd support, familiarity with the facility, travel fatigue affecting the visiting team, and psychological states such as territorial behavior. Subsequent research has expanded this framework to include referee bias favoring home teams in crowd-influenced decisions, and strategic adaptations by experienced away-playing

teams.

In the context of university sport, the home advantage assumes additional dimensions. University athletes are typically embedded in their home campus social environment they are familiar with the training facilities, the crowd comprises fellow students and staff, and the absence of travel allows optimal pre-competition preparation routines. Away competitions disrupt each of these contextual supports simultaneously, creating a compounded stressor profile that is likely to be more disruptive for student athletes than for professional players who travel and compete away regularly (Courneya & Carron, 1992; Hollings et al., 2012).

2.2 Psychological Effects of Venue Change

Research has consistently demonstrated that competing at an unfamiliar venue elevates competitive anxiety and reduces self-confidence in athletes. Martin et al. (2017) found that athletes competing at a new venue reported significantly higher anxiety and lower confidence than those at their home venue. This finding is consistent with established anxiety-performance theory, which holds that elevated state anxiety particularly cognitive anxiety relating to worry and negative performance expectancies tends to impair performance in sports requiring precision, tactical decision-making, and sustained concentration (Jones & Swain, 1995).

Weinberg et al. (2012) demonstrated that athletes competing in an unfamiliar venue performed measurably worse than when competing in familiar settings, a finding replicated across multiple sport contexts. Hill and Hemmings (2015) identified a particular vulnerability for sports requiring technical precision and concentration including racquet sports, team games, and

field athletics where unfamiliarity with venue dimensions, surfaces, and acoustics can compound anxiety-driven performance decrements.

Within the Pakistani university context, athlete psychology is further shaped by socio-cultural factors specific to the local context. Female athletes competing in inter-varsity settings may face additional stressors when travelling away from their home institution, including family-related concerns, logistical challenges, and the absence of familiar institutional support systems. The importance of developing culturally and contextually sensitive understanding of venue-related psychological effects in Pakistani female athletes is therefore paramount.

2.3 Physiological and Environmental Factors

Beyond psychology, competition venue change imposes physiological demands on athletes. Travel fatigue arising from long distances, disrupted sleep patterns, and altered pre-competition nutrition and hydration routines can reduce physical readiness and impair the neuromuscular precision required for athletic performance (Hollings et al., 2012; Hancock & Vasmatazidis, 2017). In Pakistan, inter-varsity competitions may require athletes to travel across provinces, sometimes involving journeys of many hours, creating substantial fatigue exposure before competition even begins.

Differences in climate and altitude between venues can also affect endurance capacity and thermoregulatory responses. Hamlin et al. (2015) documented significant effects of altitude on elite track and field performance. While altitude differences may be less pronounced within the Punjab inter-university context, temperature and humidity variations between venues

particularly across different seasons and geographic settings in Pakistan may still meaningfully influence physical performance (Hancock & Vasmatazidis, 2017). Crowd noise at away venues generates an auditory environment that differs markedly from home conditions, and Reilly and Piercy (2003) identified crowd noise and character as significant environmental moderators of athlete performance.

2.4 Team Coordination and Strategic Adaptation

Changes in playing surface, pitch dimensions, and spatial layout at away venues can disrupt the ingrained spatial representations that underpin team coordination (Carling et al., 2008). Performance analysis literature in football and rugby union has documented that situational variables including game location significantly moderate performance indicators such as passing success, territorial dominance, and tactical execution (Colomer et al., 2020). For university team sport athletes, whose tactical automaticity is less deeply ingrained than professionals, these venue-driven disruptions to coordination may be especially consequential.

Coaching teams must adapt training regimens to simulate conditions at the away venue adjusting for surface type, dimensions, and environmental factors while also managing the psychosocial dynamics of an away environment. In HEC inter-varsity competition, the resources available to university coaching teams for such preparation are typically limited, making venue adaptation a significant challenge.

2.5 Pakistani University Sport Context

Pakistan's HEC inter-varsity sports program constitutes the primary competitive platform

for university-level athletes in the country. The program covers a wide range of sports across male and female categories, with championships hosted on a rotating basis at different university campuses. For female athletes in particular a population whose participation in competitive sport has grown substantially in recent years but whose access to sports science support remains limited the challenges of away competition are compounded by contextual and institutional factors specific to the Pakistani socio-cultural environment. Gill et al. (2023) and related domestic literature have begun to document the performance and rehabilitation challenges facing Pakistani university athletes; the present study extends this focus to the underexplored domain of competition venue effects.

3. METHODOLOGY

3.1 Research Design

This study adopted an exploratory, quantitative research design appropriate to the early-stage, descriptive nature of the inquiry. Given the absence of prior empirical data on venue-change effects in Pakistani university sport, an exploratory approach was deemed more suitable than a confirmatory or experimental design. The study examined the distribution of self-reported psychological and physiological responses to away-venue competition and tested whether response distributions departed significantly from equal distribution across response categories.

3.2 Study Population and Sample

The target population comprised female university athletes participating in HEC inter-varsity sports championships in Pakistan during 2023–24. A purposive sampling technique was employed to recruit 100 female players from multiple universities across Pakistan. Purposive sampling was appropriate given the need to

recruit participants who were actively engaged in inter-varsity competition and present at the away venue immediately prior to competition. The sample represented a cross-section of sports disciplines, universities, and provinces, providing a broad exploratory picture of venue-change experiences.

3.3 Research Instrument

Data were collected using an adapted 15-item questionnaire derived from the Competitive State Anxiety Inventory-2 (CSAI-2; Martens, Vealey & Burton, 1990), one of the most widely validated instruments for measuring competitive state anxiety in sport. The original CSAI-2 measures cognitive anxiety, somatic anxiety, and self-confidence. The adapted instrument in this study captured a broader range of venue-related psychological and physiological states including self-confidence, anxiety, team coordination, fatigue, safety, crowd pressure, mood disruption, arousal, and behavioral responses (aggression, offensive behavior). Each item was framed with reference to the away-venue context, using the stem 'In my opinion, I [experience] while playing outside from my home ground.'

Responses were recorded on a 5-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree. The questionnaire was administered to players 20 minutes before competition to capture pre-competition states at the away venue.

3.4 Data Collection Procedure

The researcher visited multiple inter-varsity championship venues during the 2023–24 competition season and administered questionnaires directly to consenting players 20 minutes prior to the commencement of competition. This timing was selected to capture competitive state responses during the active pre-competition period, consistent

with the CSAI-2 administration protocol. Players were briefed on the purpose of the study, assured of data confidentiality, and provided written consent before completing the questionnaire.

3.5 Data Analysis

All data were analyzed using SPSS Version 25.0. Chi-Square Goodness-of-Fit tests were applied to each of the 15 items to determine whether the observed distribution of responses across the five response categories (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree) differed significantly from an expected equal distribution (expected frequency = 20 per category, based on $n = 100$). The alpha level for statistical significance was set at $p < .05$. Descriptive statistics (frequency counts and percentages for each response category) were computed for all items to characterize the direction and magnitude of venue-related responses.

4. RESULTS AND DATA ANALYSIS

This chapter presents the results of Chi-Square analyses for each of the 15 questionnaire items. All items yielded statistically significant Chi-Square values ($p < .001$), indicating that observed response distributions departed significantly from equal distribution across categories for every dimension assessed. Table 1 provides a summary of all 15 items. Detailed item-by-item analyses follow.

Table 1. Summary of Chi-Square Results for All 15 Items ($n = 100$)

Item	Statement (abbreviated)	SA	A	N	D	SD	χ^2	p
Q1	I feel unwell while playing outside my home ground.	21	38	24	11	5	32.667	.000
Q2	I feel anxiety while playing outside my home ground.	3	39	42	11	4	74.283	.000
Q3	I lose self-confidence while playing outside my home ground.	6	22	55	12	4	88.121	.000
Q4	I feel powerless while playing outside my home ground.	6	40	35	17	1	69.141	.000
Q5	I lose my integrity while playing outside my home ground.	6	22	55	12	4	50.848	.000
Q6	I cannot co-ordinate with my teammates while playing outside my home ground.	3	30	52	11	3	90.040	.000
Q7	I feel tired while playing outside my home ground.	3	30	46	15	5	66.404	.000
Q8	I do not feel safe while playing outside my home ground.	7	26	51	14	1	78.929	.000
Q9	I feel greater crowd pressure while playing outside my home ground.	39	20	26	9	5	37.515	.000
Q10	I feel disheartened while playing outside my home ground.	7	46	30	15	1	67.212	.000
Q11	I feel more excited while playing outside my home ground.	4	26	53	15	1	89.232	.000
Q12	I feel more energetic while playing outside my home ground.	3	33	43	17	3	64.889	.000
Q13	I feel more arrogant while playing outside my home ground.	5	31	51	8	4	86.202	.000
Q14	I show more aggression while playing outside my home ground.	3	38	42	13	3	72.465	.000

SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree; χ^2 = Chi-Square value; p = significance value. Expected frequency = 20.0 per cell. All items: $df = 4$, $p < .001$.

4.1 Negative Psychological Effects of Away Venue

Q1: Feeling Unwell Away from Home Ground

Of the 100 respondents, 38 (38%) agreed and 21 (21%) strongly agreed that they felt unwell while competing away from their home ground, representing 59% of the sample reporting some level of physical or psychological discomfort at the away venue. Only 11 (11%) disagreed and 5 (5%) strongly disagreed. The Chi-Square test was statistically significant ($\chi^2 = 32.667$, $p < .001$), confirming that responses were not distributed equally across categories.

Q2: Anxiety Away from Home Ground

Competitive anxiety was one of the most prominently endorsed items, with 42 players (42%) agreeing and 3 (3%) strongly agreeing that they experienced anxiety at the

away venue (combined 45%). Thirty-nine players (39%) remained neutral. The highly significant Chi-Square value ($\chi^2 = 74.283$, $p < .001$) reflects a pronounced clustering of responses toward the agree end of the scale. This finding is consistent with the established literature linking unfamiliar venue competition with elevated pre-competition anxiety (Martin et al., 2017; Jones & Swain, 1995).

Q3: *Loss of Self-Confidence*

Fifty-five players (55%) reported a neutral response to feeling a loss of self-confidence at the away venue, while 22 (22%) agreed and 6 (6%) strongly agreed. Although the modal response was neutral, the significant Chi-Square ($\chi^2 = 88.121$, $p < .001$) and the 28% combined agreement rate underscore that confidence reduction is an away-venue effect experienced by a meaningful proportion of the sample. The predominantly neutral response may reflect athletes' efforts to maintain psychological composure during the pre-competition period.

Q4: *Feeling Powerless Away from Home Ground*

Forty players (40%) agreed and 6 (6%) strongly agreed that they felt powerless when competing away from home (combined 46%), with 35 players (35%) remaining neutral. Only 17 (17%) disagreed and 1 (1%) strongly disagreed ($\chi^2 = 69.141$, $p < .001$). The sense of powerlessness at the away venue likely reflects reduced environmental control, athletes have less familiarity with the facilities, less institutional support from the home crowd, and limited influence over logistical arrangements.

Q5: *Loss of Integrity at Away Venue*

When asked about losing their sense of

integrity or composure at the away venue, 22 players (22%) agreed and 6 (6%) strongly agreed, while 55 (55%) remained neutral ($\chi^2 = 50.848$, $p < .001$). This pattern mirrors the self-confidence item, suggesting that while the majority of players attempt to maintain a composed front, a significant minority experience disruptions to their sense of personal standards and behavioral composure when competing outside their home environment.

Q6: *Team Coordination Difficulties*

Team coordination difficulties emerged as the most strongly endorsed negative effect, with 52 players (52%) agreeing that they could not coordinate effectively with teammates at the away venue. Only 3 players (3%) strongly agreed, 30 (30%) disagreed, 11 (11%) agreed, and 3 (3%) strongly agreed. The Chi-Square value of 90.040 ($p < .001$) indicates a highly significant departure from equal distribution. This finding has direct implications for team sport performance: away-venue competition disrupts the spatial and communicative coordination upon which collective athletic performance depends, likely due to unfamiliar playing dimensions, altered crowd noise levels, and disrupted pre-competition routines.

Q7: *Physical Fatigue*

Forty-six players (46%) reported feeling physically tired when competing at the away venue, with 30 (30%) disagreeing. The significant Chi-Square ($\chi^2 = 66.404$, $p < .001$) confirms that fatigue is a widely experienced correlate of away-venue competition for Pakistani university athletes. This is consistent with the travel-fatigue literature, which documents impairments in physical readiness arising from journey duration, sleep disruption, and altered pre-competition nutrition and hydration access (Hollings et al., 2012).

Q8: *Reduced Sense of Safety*

Fifty-one players (51%), the largest proportion for any negative item agreed that they did not feel safe at the away venue, with 7 (7%) strongly agreeing. This finding is particularly notable in the Pakistani university sport context: for female athletes travelling to compete at other universities, concerns about personal safety in unfamiliar institutional environments may represent a significant contextual stressor with direct performance implications ($\chi^2 = 78.929$, $p < .001$). University sport administrators should consider athlete safety protocols at away venues as a priority welfare concern.

Q10: *Feeling Disheartened*

Forty-six players (46%) agreed that they felt disheartened when competing away from home ($\chi^2 = 67.212$, $p < .001$). This emotional response characterized by deflated morale and diminished motivation is likely a downstream consequence of the accumulated effects of unfamiliar surroundings, reduced crowd support, and travel fatigue documented across other items in the instrument. Emotional disengagement of this kind is associated with reduced effort investment and performance deterioration in competitive sport.

4.2 Arousal and Activation Effects of Away Venue

Q9: *Crowd Pressure*

An unexpected pattern emerged for crowd pressure: 39 players (39%) strongly agreed that they experienced greater crowd pressure at the away venue, and 20 (20%) agreed, for a combined endorsement of 59%. This is the highest combined agreement rate for any single item and represents a striking finding. Opposition crowd effects at away venues including hostile chanting, unfamiliar crowd noise, and the absence of supportive home spectators appear to create substantial

psychological pressure for Pakistani university female athletes ($\chi^2 = 37.515$, $p < .001$; Reilly & Piercy, 2003).

Q11: *Increased Excitement*

Despite the predominantly negative away-venue experience, 53 players (53%) agreed that they felt more excited when competing away from home, and 4 (4%) strongly agreed ($\chi^2 = 89.232$, $p < .001$). This finding reflects the motivational complexity of the away-competition context: the novelty of the unfamiliar environment, the competitive challenge of opposing home support, and the elevated salience of the occasion can generate positive arousal responses that co-exist with anxiety and fatigue. Facilitative interpretation of arousal — in which athletes reframe anxiety as excitement has been identified as a key performance-enhancing cognitive strategy (Ton et al., 2000).

Q12: *Increased Energy*

Forty-three players (43%) agreed that they felt more energetic at the away venue ($\chi^2 = 64.889$, $p < .001$). This paradoxical energization at the away venue alongside reported fatigue may reflect the competing influence of physiological arousal elevation (driven by unfamiliarity and crowd pressure) and objective travel-related fatigue. The co-existence of high arousal and high fatigue represents a potentially suboptimal performance state, suggesting that athletes may feel energetically 'wound up' without the physical resources to channel this effectively.

Q13: *Increased Arrogance*

Fifty-one players (51%) agreed that they felt more arrogant when competing away from home ($\chi^2 = 86.202$, $p < .001$). This finding is interpretable within the context of heightened competitive motivation: a confrontational or assertive psychological stance in response to the perceived challenge

of the away environment. While this may represent an adaptive motivational orientation for some athletes, unmodulated arrogance can impair tactical flexibility, team cohesion, and responsiveness to in-game cues.

Q14: Increased Aggression

Forty-two players (42%) agreed that they displayed more aggression at the away venue ($\chi^2 = 72.465$, $p < .001$). Heightened aggressive responses in away-competition contexts are consistent with the broader literature on frustration-aggression in sport and may reflect the psychological pressure and perceived threat of hostile crowd environments. While appropriate competitive assertiveness is performance-enhancing, uncontrolled aggression can compromise disciplinary standing and team cohesion.

Q15: Increased Offensive Behavior

Thirty-four players (34%) agreed they became more offensive at the away venue, with 22 (22%) strongly agreeing representing the highest strongly-agree endorsement across all items alongside Q9 ($\chi^2 = 28.727$, $p < .001$). This finding, in conjunction with items on aggression and arrogance, suggests that a subset of players responds to away-venue pressures with a cluster of heightened assertive and confrontational behaviors that may reflect a behavioral coping strategy for managing the psychological demands of unfamiliar competition contexts.

5. DISCUSSION

5.1 Multidimensional Effects of Venue Change

The findings of this study provide the first systematic empirical documentation of competition venue change effects in Pakistani university sport, specifically

among female inter-varsity athletes. The results confirm that away-venue competition generates a wide-ranging and statistically significant pattern of psychological and physiological responses, with all 15 items yielding Chi-Square values significant at $p < .001$. This uniformity of statistical significance across diverse dimensions spanning anxiety, self-confidence, team coordination, fatigue, safety, crowd pressure, emotional state, and behavioral orientation underscores the pervasiveness and strength of venue change as a contextual stressor in Pakistani university athletics.

The pattern of findings is broadly consistent with the international literature on home advantage and away-venue competition (Courneya & Carron, 1992; Martin et al., 2017; Weinberg & Gould, 2012; Hill & Hemmings, 2015). The most prominently endorsed negative effects team coordination difficulties (52%), reduced sense of safety (51%), and disheartening experiences (46%) converge with the conceptual framework proposed by Courneya and Carron (1992), in which crowd factors, facility familiarity, and travel effects combine to disadvantage visiting athletes. The anxiety finding (42% agreement) aligns with Martin et al.'s (2017) experimental evidence, while the fatigue endorsement (46%) is consistent with the travel fatigue literature (Hollings et al., 2012).

5.2 The Simultaneous Arousal-Impairment Paradox

A particularly noteworthy feature of the findings is the co-existence of negative performance-related responses (anxiety, fatigue, loss of confidence) with positive arousal responses (excitement 53%, increased energy 43%). This apparent paradox is consistent with established psychophysiological models of sport

performance: the individual zones of optimal functioning (IZOF) framework suggests that athletes differ in the arousal level at which they perform optimally, and that elevated arousal can facilitate or debilitate performance depending on individual thresholds and the specific demands of the sport (Ton et al., 2000). The simultaneous presence of heightened excitement and fatigue in away-competition contexts represents a particularly complex performance state for university athletes to navigate one that requires psychological regulation skills that are often underdeveloped at this level of competition.

The heightened arousal, aggression, arrogance, and offensive behavior reported by a significant proportion of players at away venues further suggest that the away-competition context elicits a defensive-competitive psychological orientation in many athletes. This may be an adaptive response a form of psychological fortification against the hostile environment but it requires appropriate channeling by coaches and sport psychologists to avoid disciplinary consequences and ensure that assertive energy is directed productively into performance.

5.3 Safety Concerns and the Pakistani Female Athlete Context

The finding that 51% of respondents reported not feeling safe at away venues is among the most practically significant results of the study, and one that is particularly salient for Pakistani female athletes. In the Pakistani socio-cultural context, female athletes face unique challenges related to mobility, institutional support, and personal safety when travelling for competition. University sport administrators, HEC officials, and competition organizers have a direct responsibility to ensure that away-venue

environments are safe, welcoming, and appropriately supported for female athletes. The significant proportion of players reporting safety concerns suggests that current provisions may be insufficient and warrant immediate institutional attention.

5.4 Crowd Pressure and the Away Environment

The finding that 59% of respondents experienced heightened crowd pressure at away venues with 39% strongly agreeing is consistent with the crowd effects literature (Reilly & Piercy, 2003) and highlights crowd management as an important consideration for HEC-sanctioned competitions. Pakistani university sports events frequently draw substantial crowds of student supporters, and opposing home crowds can create environments that, without psychological preparation, may be substantially disruptive for away athletes. Education of players and coaches in strategies for managing crowd-related psychological pressure including attention control strategies, pre-competition psychological routines, and team cohesion practices should be integrated into inter-venue sport preparation programs.

5.5 Implications for Coaching and Sport Administration

The findings carry several actionable implications. Coaches preparing teams for away-venue competition in Pakistani inter-venue settings should incorporate systematic psychological preparation targeting anxiety management, confidence maintenance, team coordination simulation in unfamiliar settings, and productive channeling of heightened arousal. Pre-competition exposure to videos or virtual walkthroughs of away venues, standardized pre-competition routines that can be maintained regardless of venue, and team cohesion activities during travel may all help

to mitigate the venue-change effects documented in this study.

HEC and university sport administrators should consider policies that mandate adequate travel time for away-competing athletes, standardize minimum facility requirements at inter-varsity venues, and provide welfare support including safe accommodation and catering. The development of sport psychology services within Pakistani university athletic programs an area of considerable current need would provide the specialized expertise required to address the psychological dimensions of venue-related performance disruption documented here.

5.6 Limitations and Future Directions

Several limitations constrain the generalizability of these findings. The sample was restricted to female athletes competing in the 2023–24 HEC inter-varsity season, limiting applicability to male athletes, older athletes, and other competitive seasons. The cross-sectional, self-report design does not allow causal inference, and social desirability bias may have influenced some responses particularly those relating to negative psychological states assessed immediately before competition. The 15-item adapted instrument, while grounded in the validated CSAI-2, has not been independently validated in Pakistani sport contexts, which limits the psychometric robustness of the findings.

Future research should employ validated, standardized instruments across larger, more diverse samples including male athletes, different sports, and multiple competitive seasons. Longitudinal or experimental designs that directly compare performance outcomes at home and away venues with objective performance measurement would substantially strengthen causal inference.

Qualitative investigations exploring the lived experience of Pakistani university athletes at away venues would add contextual depth to the quantitative patterns identified here.

6. CONCLUSION

This exploratory study provides the first empirical documentation of competition venue change effects among Pakistani university-level female athletes. Across all 15 dimensions assessed, the change of competition venue was found to exert a statistically significant and multidimensional influence on athletes' psychological and physiological states. The most prominent negative effects included team coordination difficulties (52%), reduced sense of safety (51%), physical fatigue (46%), emotional disheartening (46%), and competitive anxiety (42%). Simultaneously, heightened arousal responses including excitement (53%), arrogance (51%), increased energy (43%), and aggression (42%) were also endorsed by substantial proportions of players, reflecting the psychological complexity of the away-venue competitive experience.

These findings confirm that competition venue change is a significant and underappreciated variable in the performance ecology of Pakistani university sport, with particular implications for female athletes' welfare and safety. Coaches, university sport administrators, and HEC policymakers should treat venue-change preparation as a systematic component of inter-varsity competition management — one that requires investment in psychological preparation, travel welfare, facility standards, and athlete safety protocols. This study lays a foundation for future applied research and evidence-based

practice development in this important and previously unexamined domain of Pakistani university sport science.

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