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Assessing Levels Of Sports Aggression Across Competitive Tiers: A Study Of Badminton Players At National, Inter-University, State, And Inter-Collegiate Levels

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Abstract

This study conducts a comparative analysis of badminton players across multiple competitive tiers to explore their psychological attributes within the domain of physical education. The primary objective is to elucidate the psychological profiles of badminton players at national, inter-university, state, and inter-collegiate levels. One of the focal variables under scrutiny is sports aggression. Rigorous statistical methodologies were employed by the researchers to ensure the robustness of the findings. The initial step involved conducting a normality test, utilizing the Shapiro-Wilk test, to assess whether the data met the assumptions requisite for parametric analysis. Subsequently, descriptive statistics were utilized to present the mean and standard deviation of the collected data once the normal distribution was confirmed for all variables. Inferential statistics, specifically a One-Way ANOVA test, were then employed to examine significant differences between player groups. The observed disparities in aggression shed light on the diverse experiences encountered by players at different stages of their athletic careers. The results reveal a significant distinction observed among players at various levels on the Sports Aggression Inventory. Consequently, the null hypothesis was rejected at the 0.05 significance level. These findings hold implications for trainers, coaches, and sports psychologists involved in the realm of badminton, while also contributing to the understanding of psychological dimensions in sports.

Keywords: Badminton; Sports Aggression; Sports psychology;

Introduction

The sport of badminton, an indoor racquet sport, involves players using a shuttlecock, also known as a bird or shuttle, to compete. It can be played in singles or doubles, with players positioned on opposite ends of a rectangular court divided by a net. The shuttlecock's

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aerodynamic properties, owing to its feathered design, cause it to fly differently from balls used in other racquet sports. Points are scored by striking the shuttlecock into the opponent's court (Singh, 2006). India hosts numerous national-level badminton tournaments sanctioned by the Badminton Association of India (BAI), as detailed on the association's official website. These tournaments provide a platform for talented Indian players to demonstrate their skills and compete for top honors. Notable among these competitions are the All-India Inter-State, Inter-Zonal, and Senior National Badminton Championships, attracting top players across various age categories. These championships feature competitions in men's and women's singles and doubles, as well as mixed doubles, with teams representing different Indian states competing for national titles. State-level badminton tournaments in India, organized by state badminton associations or governing bodies, play a crucial role in identifying and nurturing local talent. These tournaments, conducted at district, inter-district, and state levels, form an integral part of India's badminton ecosystem. The Inter-University Badminton Tournament in India, organized annually by the Association of Indian Universities (AIU), serves as a platform for students from universities across India to compete and promote sportsmanship and teamwork. Similarly, Inter-Collegiate Badminton Tournaments highlight the talent and competitive spirit of college-level players, providing a platform for young athletes to represent their colleges and compete at various levels. In the realm of sports, mental factors contribute significantly, accounting for 90% of activity, while physical exertion constitutes the remaining 10% (Georgiou, Becchio, Glover, & Castiello, 2007; Abbas & Jasim, 2018). While observable, the psychological aspects driving behaviour in sports may not be directly discernible (Raglin, 2001). Numerous psychological factors influence motor behaviour (Stefani, Marco, & Gentilucci, 2015), with information processing capability playing a significant role in both motor behavior and athletic performance (Plessner & Haar, 2006).

Methodology

The participants were purposefully selected based on four distinct categories: players who had competed in National Championships, Inter-University Championships, State Championships, and Inter-Collegiate Male Badminton Championships. The age range of the selected participants was between 18 and 25, with 32 National-level players, 31 State-level players, 31 Inter-University players, and 31 Inter-Collegiate players chosen. These participants were specifically chosen for their demonstrated sporting prowess and their representation of their respective institutions at various competitive levels. This selection

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criterion was crucial for gaining insights into the skills and achievements of the participants, as well as for assessing their level of commitment and dedication to their chosen sport. Descriptive statistics and One-Way ANOVA were employed to calculate the mean, standard deviation, and analyse any significant differences among the groups.

Results

Table 1 Mean comparison of Aggression of National, State, Inter University and Inter Collegiate players

	N	Mean	S. D		Sum of Squares	Sig.
National Players	32	12.21	3.09	Between Groups	832.55	.000
State Players	31	15.03	2.35	Within Groups	940.24	
Inter University	31	17.03	2.73	Total	1772.800	
Inter Collegiate	31	19.19	2.89			

Table 1 presents the sample size, range (minimum and maximum values), mean, and standard deviation of aggression levels among national, inter-university, state, and inter-collegiate badminton players. Additionally, it includes inferential statistics using One-Way ANOVA to examine differences in aggression between these player groups, with a rejection of the null hypothesis observed at the 0.05 significance level.

Table -2 Post Hoc test: Bonferroni

(I) Groups	(J) Groups	Mean Difference (I-J)	Sig.
National Players	Inter-University Players	2.81*	0.00
	State-Players	4.81*	0.00
	Inter-Collegiate Players	6.97*	0.00
Inter-University Players	State-Players	2.00*	0.03
	Inter-Collegiate Players	4.16*	0.00
State-Players	National Players	4.81*	0.00
	Inter-Collegiate Players	2.16*	0.01

Table 2 shows the post hoc tests using Bonferroni pairwise comparisons of Aggression between National, Inter-University, State, and Inter Collegiate badminton players, where it rejects the null hypothesis at 0.05 level of significance

ISSN PRINT 2319 1775 Online 2320 7876

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Discussions

In examining aggression levels among male badminton players, significant differences were observed across all pairwise comparisons of player groups at the 0.05 significance level. Notably, National players exhibited the lowest aggression scores, followed by Inter-University players, State players, and finally, Inter-Collegiate players. Various research studies provide insights into the factors influencing aggression in sports. Lazarevic (1981) suggests that senior players generally exhibit lower degrees of aggressive reactions compared to younger players, while Tusak (1997) argues that aggressiveness tends to decrease with age in team sports. Additionally, Berkowitz (1989) highlights the role of provocation, frustration, or aversive stimuli in eliciting negative effects, leading to anger and subsequent aggression. Frustration, though not always resulting in aggressive behaviour, creates a predisposition for aggression through feelings of anger, hostility, or other negative emotions. To clarify the conceptual ambiguity surrounding anger, hostility, and aggression, Spielberger (1991) defines anger as an emotional state characterized by varying degrees of intensity, ranging from mild annoyance to fury and rage, accompanied by corresponding changes in arousal within the autonomic nervous system. Hostility, on the other hand, encompasses a complex set of attitudes motivating aggressive behaviours directed towards destroying objects or injuring others, typically involving angry feelings on the part of the aggressor. Anger has a profound impact on performance, influencing attention, information processing, decision-making, execution, and control of actions (Jones, 2003).

Conclusions

The findings indicate that National players displayed significantly lower levels of sports aggression compared to Inter-University, State, and Inter-Collegiate players. Anger, while potentially motivating, can also be detrimental to performance, leading to wasted energy, decreased achievements, and inappropriate acts of violence. Alternatively, players may channel their anger instrumentally towards productive and assertive behaviours, such as strategic tackling and defensive manoeuvres. Therefore, it is essential for players and coaches to recognize and manage emotions effectively to optimize performance outcomes.

Conflict of Interest: Authors declare no conflict of interest

References

Abbas, B. K., & Jasim, I. A. (2018). The Models of Used Virtual Reality Technology in Sports. International Journal of Computer Science and Mobile Computing, 7(9), 76-85.

Das, R., & Jhajharia, B. (2022). Association between physical fitness and BMI among school going male children. 2, 111–114. https://doi.org/10.33545/27077012.2021.v2.i1b.45

Das, R., Jhajharia, B., & Das, K. (2022). Prediction Model of Success and Failure in Football Competitions Prediction Model of Success and Failure in Football. International

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Journal of Research Pedagogy and Technology in Education & Movement Sciences, 12. https://doi.org/10.55968/uniaca.2022.11.2.3

Das, R., Jhajharia, B., & Kumar, D. (2021). Analysis isokinetic muscular strength of knee flexors and extensors between bowlers, batsman and wicketkeepers in cricket. 1, 50–53.

Das, R., Singh, V., Jhajharia, B., & Das, P. (2022). The Perception of Students Toward E-Learning Versus Traditional Classroom Learning. 6, 7198–7206.

Domestic Tournaments. (n.d.). The Official Website of Badminton Association of India | BadmintonIndia.org. Retrieved 3 October 2023, from https://www.badmintonindia.org/beta/events/tournaments/domestic/

Georgiou, I., Becchio, C., Glover, S., & Castiello, U. (2007). Different action patterns for cooperative and competitive behaviour. Cognition, 102(3), 415-433.

Jones, G. (2003). What is this thing called mental toughness? An investigation of elite sport performers. Journal of applied sport psychology, 14(3), 205-218.

Plessner, H., & Haar, T. (2006). Sports performance judgments from a social cognitive perspective. Psychology of Sport and Exercise, 7(6), 555-575.

Raglin, J. S. (2001). Psychological factors in sport performance: the Mental Health Model revisited. Sports medicine, 31(12), 875-890.

Sharma, A., & Prasad, B. K. (2023). Effect of VMBR Training on Psychological Dimensions of Anxiety and Mental Toughness of Table Tennis Players. Physical Education Theory and Methodology, 23(1), 28-34.

Sharma, A., & Purashwani, P. (2021). Relationship between selected psychological variables among trainees of combat sports. Journal of Sports Science and Nutrition, 2(1), 01-03.

Singh, M.K. (2006), "A to Z Badminton". Friends Publications Ansari Road, Darya Ganj New Delhi. p 2-3

Spielberger, C.D. (1966). Theory and research on anxiety. In C.D. Spielberger (Ed.), Anxiety and behavior (pp. 3-20). New York: Academic Press.

Stefani, E. D., Marco, D. D., & Gentilucci, M. (2015). Factors affecting athletes' motor behavior after the observation of scenes of cooperation and competition in competitive sport: the effect of sport attitude. Frontiers in psychology, 6: 1648, 1-9.