

Kazimierz Wielki University in Bydgoszcz
Doctoral School

Kanupriya Rawat

A cross-cultural study on achievement motivation in sports, competitive trait anxiety, and physical self-concept of traditional and virtual football players

Supervisor: dr hab. Aleksandra Błachnio, prof. uczelni

Abstract

This doctoral dissertation examined achievement goals, competitive trait anxiety, and physical self-concept among traditional football and competitive eFootball players in Poland and India. The study employed a cross-cultural, cross-contextual 2×2 design to investigate differences associated with country and competitive context, their joint interaction, relationships among the psychological constructs, and the role of contextual factors and professional aspirations. The final sample comprised 800 male competitive players aged 18-35 years, with 200 participants in each country-by-context group. Achievement goals were assessed using the 3×2 Achievement Goal Questionnaire for Sport (3×2 AGQ-S), competitive trait anxiety using the Sport Anxiety Scale-2 (SAS-2), and physical self-concept using the short form of the Physical Self-Description Questionnaire (PSDQ-S).

Measurement analyses supported scalar invariance of all three instruments across country, competitive context, and the four country-by-context groups, providing a basis for substantive group comparisons. Significant multivariate effects of both country and competitive context were found for achievement goals, competitive anxiety, and physical self-concept, whereas country-by-context interactions in psychological mean levels were not statistically significant. Indian participants reported stronger other-referenced achievement goals than Polish participants. They also reported greater concentration disruption and somatic anxiety, although the predicted country difference in worry was not observed. Contrary to expectations, Indian participants generally reported more favourable physical self-concepts. Across countries, football players reported higher physical self-concept, particularly in activity, sport competence, and endurance, stronger achievement-goal endorsement, and lower competitive anxiety than eFootball players.

Relationships among the psychological constructs were generally weak and varied across groups. The predicted associations between approach and avoidance goals and competitive anxiety, and between approach goals and physical self-concept, were not consistently supported. Competitive anxiety was largely unrelated to physical self-concept, and no evidence was found for the hypothesised indirect effects of achievement goals through competitive anxiety.

Contextual variables showed limited associations after correction for multiple testing. Professional aspiration produced the clearest contextual finding: football players were substantially more likely than eFootball players to report an intention to pursue their activity professionally, with this difference varying between Poland and India.

Taken together, the findings demonstrate that country and competitive context are meaningfully associated with psychological characteristics and professional aspirations among competitive football and eFootball players, while showing that differences in mean levels do not necessarily correspond to differences in the relationships among psychological constructs. By integrating cross-cultural and cross-contextual comparisons within a single balanced design and establishing measurement comparability before substantive comparisons, this dissertation provides a rigorous framework for examining the psychology of traditional and virtual sport. Importantly, it extends established sport-psychological constructs into competitive eFootball and provides an empirical foundation for future research on how culture, competitive environment, and emerging forms of sport jointly shape athletes' psychological experiences and professional aspirations.

Keywords: achievement goals; competitive anxiety; physical self-concept; esports; cross-cultural comparison; measurement invariance; association football; eFootball