## XIV Men's Volleyball Pan American Cup: Team mental toughness correlates perfectly with final placement

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## ABSTRACT

Mental toughness (MT) has been associated with competitive and non-competitive performance indicators in sport. On average, mentally tougher participants tend to be more successful. However, even in teamsport research, team MT is often disregarded over individual MT measurements. Results in team settings are trivial on whether team MT is related to athletic achievement/competitive performance. Volleyball is under-investigated in the applied MT literature. PURPOSE: To explore the relationship between team MT levels and competitive performance in volleyball. METHODS: Five national volleyball teams (i.e., Cuba, Mexico, Suriname, Dominican Republic, USA) were recruited during the XIV Men's Pan American Cup  $(n=60; m_{\text{age}} = 23.90, SD = 3.49)$ . The Mental Toughness Index (MTI) was used for data collection in the beginning of the tournament. MTI consists of eight equally-weighted items with scores ranging from one (i.e., False, 100% of the time) to seven (i.e. True, 100% of the time). The maximum MTI score is 56. The average team MTI scores were calculated and then, compared against the tournament results in IBM SPSS statistics. RESULTS: The analysis concluded a perfect correlation between team MTI scores and tournament placement (r = -1, p < 0.001). Therefore, the higher the team MTI scores, the higher the finishing place (e.g., the team with the highest team MTI score, MTI<sub>Cuba</sub> = 50.77, won the tournament). CONCLUSION: The results indicate a very strong relationship between team MT and competitive performance across American cultures. Practitioners may need to consider psychological skills training targeted to increase team MT as a means to increase competitive performance. The high level of skill, but also of difficulty to recruit, of these teams add on the significance of the findings. Our outcomes not only support larger-scale future research in similar and different settings (e.g., sport, continent, sex), but also interventional efforts. Limitations include self-report, cross-sectional design, and small sample size.

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