



Success is in the Block

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This project does not attempt to produce generalizable knowledge. It is dedicated to the practice of developing skills and demonstrating understanding of the research process



Abstract

- According to Freitas-Junior and colleagues (2020) within a single set a player may perform a vertical jump (VJ) 32 plus times
- Both Plyometrics and Ballistic training improve VJ performance (Wang et al., 2020; Jiménez-Reyes et al., 2017)
- According to Silva et al. (2014) and Rabaz et al. (2013) blocking is considered one volleyball actions that result in a game victory following a serve and a spike actions

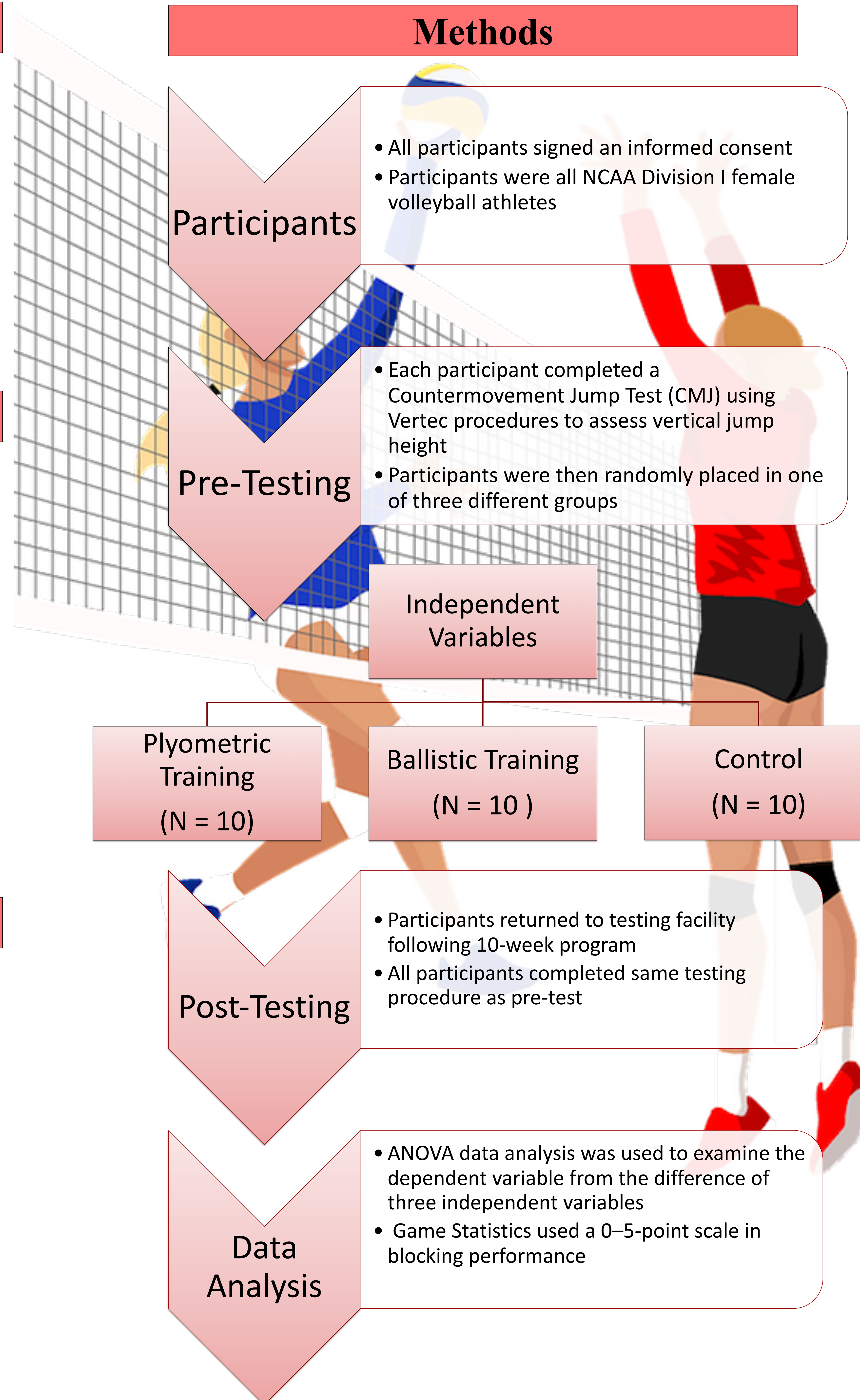
Operational Definitions

- **Ballistic Training:** Exercises that consist of moving an object with explosive power output in a given direction
- **Plyometric Training:** Exercises involving the SSC increasing power output
- **Stretch-Shortening Cycle:** Involves a three-step process in which a muscle will stretch (eccentric), amortization phase, then rapidly contract (concentric)
- **Vertical Jump:** A jump resulting in movement vertically
- **Countermovement Jump:** An action involving squatting to a selected level then rapidly extending upwards

References

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Methods



Purpose/Hypothesis

- The purpose of this study was to examine the effects of VJ performance from a plyometric versus a ballistic training program would have in relation to increasing the number of successful blocks resulting in a game victory
- It is hypothesized that plyometric program will increase VJ performance therefore increase the number of successful blocks
- It is secondly hypothesized that the increase in the number of successful blocks will result in more wins

Discussion

- Bias: All biases were attempted to be eliminated
- Assumptions: Plyometric Training increases VJ performance than Ballistic training
- Future studies should consider all aspects of VJ performance to all positions rather than just blocking

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