

Background

- Periodization is the planning of exercises, how many sets, reps, and total volume will be done within a program
- Traditional (linear) periodization involves planning the pre-season, season, and post-season training
- Block periodization works on one aspect for 2-4 weeks and then moves on to another training aspect
- Concurrent works on strength, acceleration, and power at the same time.
- All are used to elicit adaptations for sport

Purpose

This study aimed to examine what periodization method induced the best results in strength, power, and acceleration within the Hs sector.

Hypothesis

H₁ -Both groups will exhibit an increase in strength, power, and acceleration

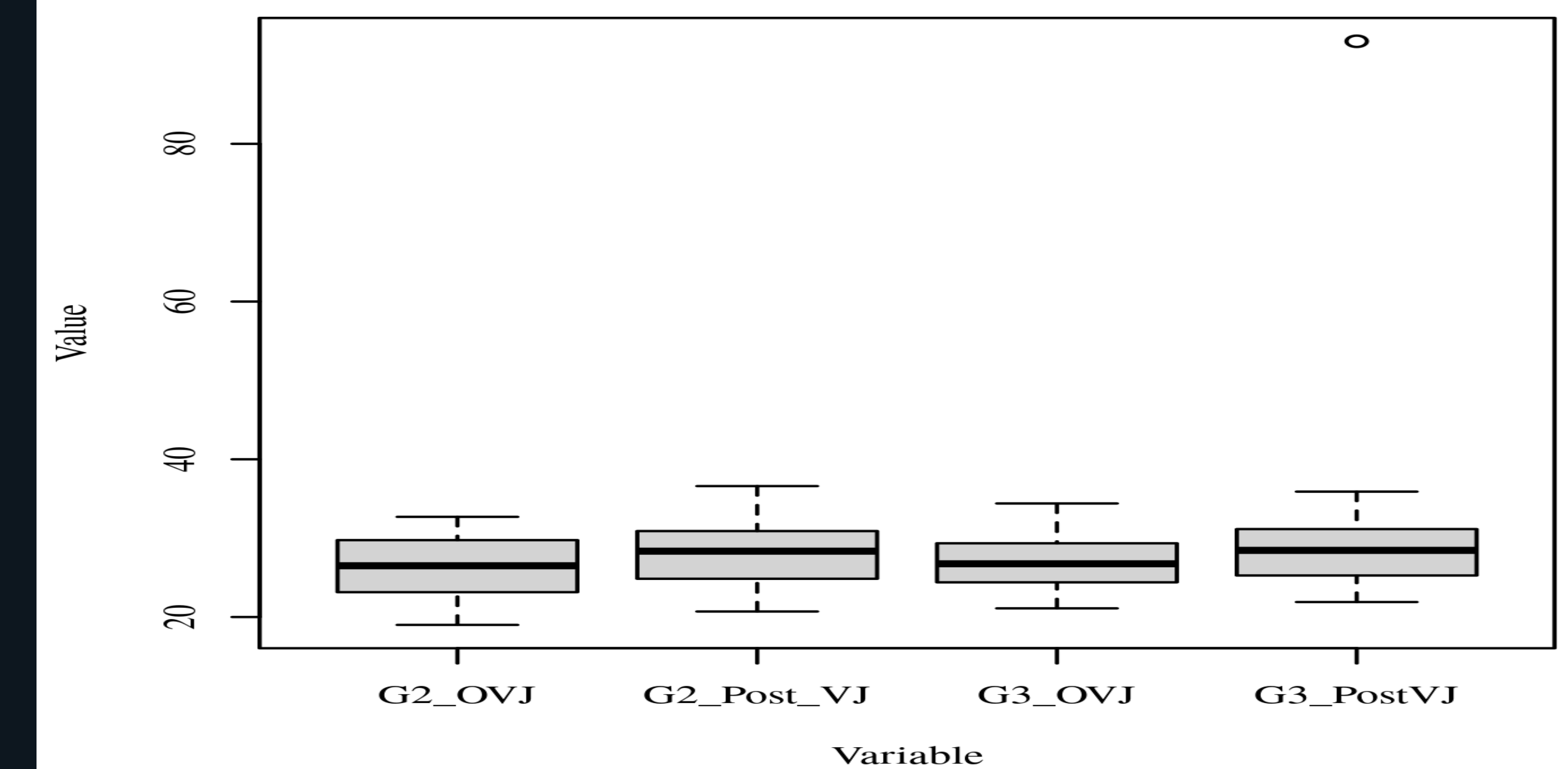
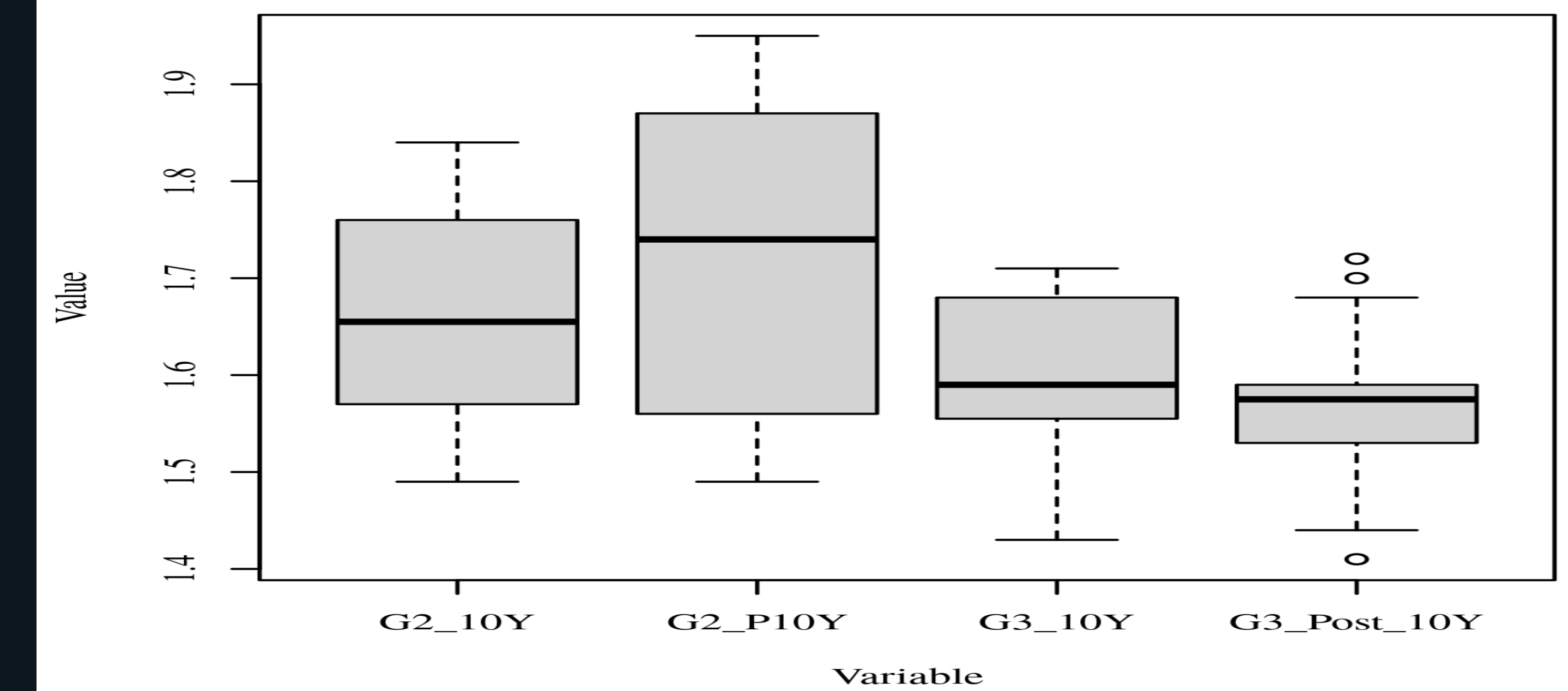
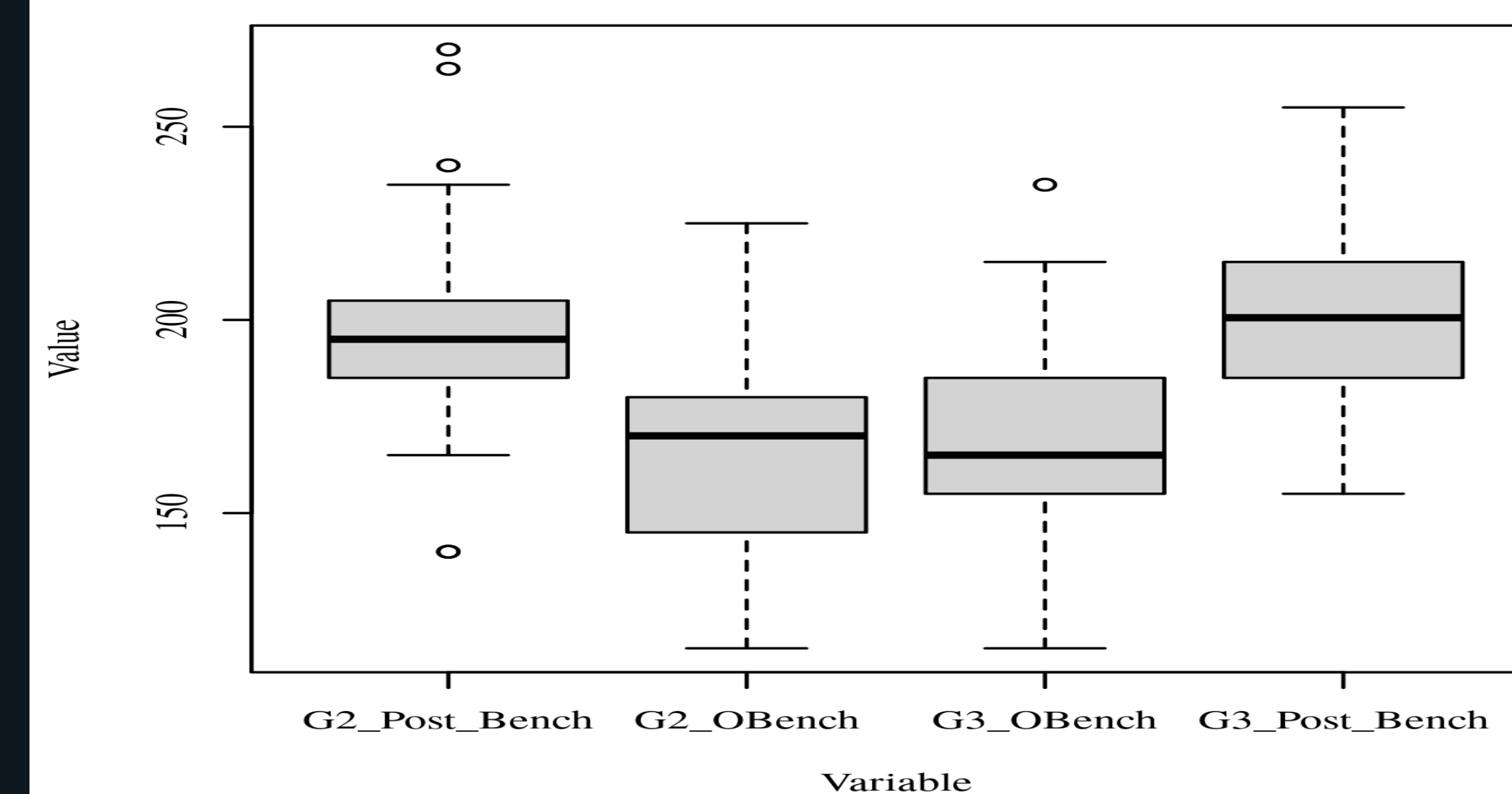
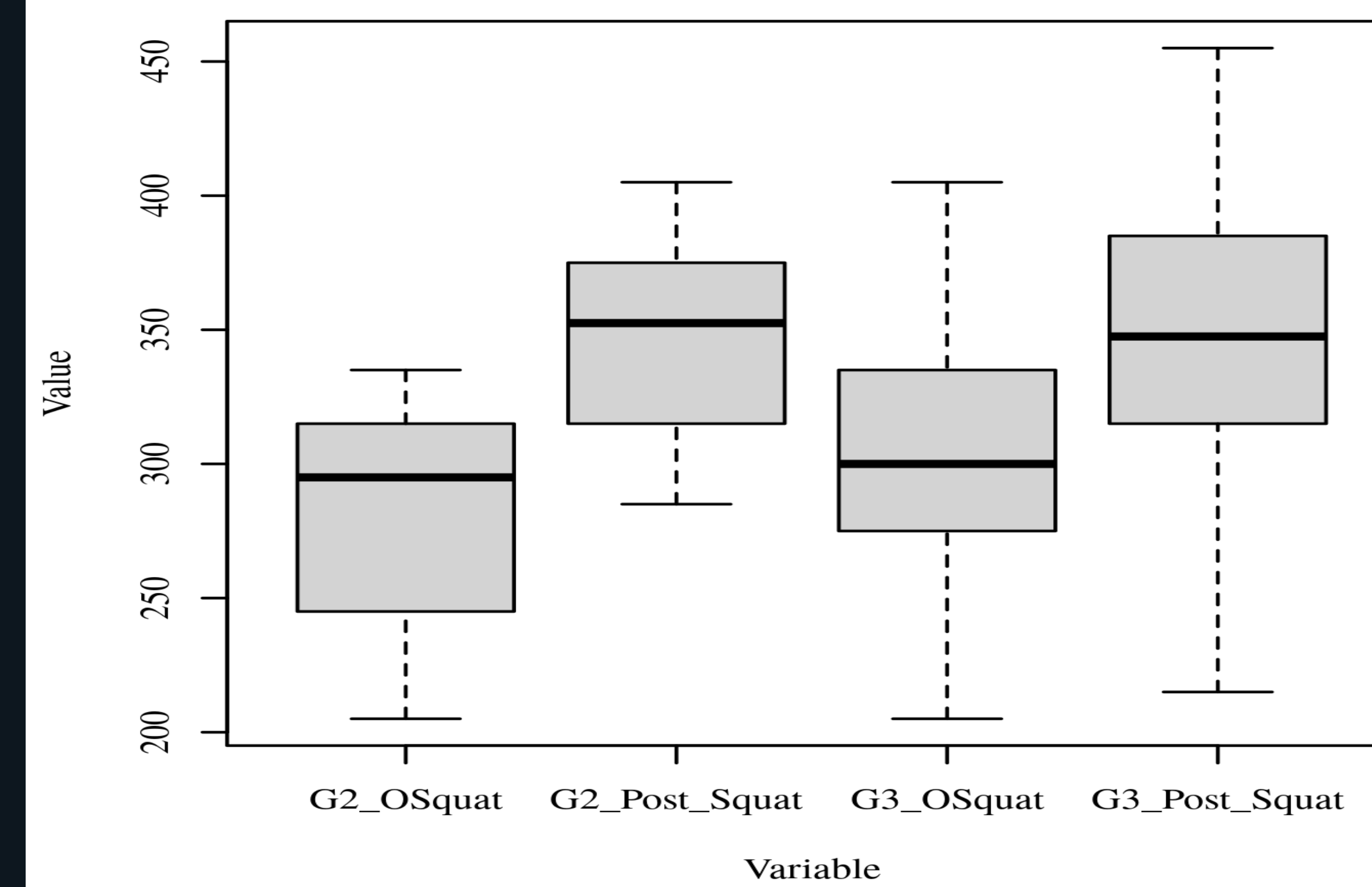
H₂-The inclusion of Block training specifically eccentric and isometric blocks will increase strength and power along with acceleration

Methods

- n=71 participants
- G2 performed a traditional program with the inclusion of a higher rep range for 16 weeks
- G3 performed a block periodization for 4-week blocks over 16 weeks.
- All data recorded by the Head Strength Coach

Results

Variable	P value	T value	Mean Diff
G2_G3 O_Bench	0.958	-0.05	0.47lb
G2_G3 P_Bench	0.402	-0.85	7.52lb
G2_G3 O_Squat	0.082	-1.80	16.63
G2_G3 P_Squat	0.678	-0.42	4.53lb
G2_G3 O_vj	0.444	-0.78	0.69
G2_G3 P_Vj	0.401	-0.85	1.77
G2_G3 O_10Y	0.007*	2.93	-0.08
G2_G3 P10Y	0.001*	4.11	-0.17



Conclusions

- There was no significance between groups in the bench press ($t(-.05, p=.958, t(-0.85, p=.402))$)
- There was no significance between groups in the squat ($t(-1.80, p=.082, t(-0.42, p=0.678)$)
- There was no significance between groups in vertical jump ($t(-0.78, p=0.44, t(-0.85, p=.401)$)
- Significance was seen in acceleration for both groups pre and post-test ($2.93, p=.007, t(4.11, p=.001)$)

Practical Application

- Both linear and block programming improved strength, power, and speed
- Block periodization may have more impact on acceleration than linear periodization
- Training age may influence both block and linear periodization in a positive manner

