The NFL Scouting Combine as a Predictor of Future On-field Success

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Disclosure

No Conflict to Disclose

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Our disclosures are in the Final AOFAS Mobile App.
We have no potential conflicts with this presentation.
Background & Objectives

- NFL scouting combine used annually by franchises for prospect evaluation
- Assessment includes physical tests such as 40yd dash, 20 sec sprint time, vertical jump distance, & horizontal jump distance
- Predictive value is understudied in the medical literature with current evidence showing conflicting results\(^1,2,3\)
- The purpose of this study is to determine if there is correlation between combine performance and subsequent NFL performance for all offensive and defensive players
Methods

- Combine physical testing performance for all positions from 2006 to 2013 obtained from NFL draft scout website
- NFL performance data for all players who entered the combine obtained from commercial website Pro Football Reference
- 617 offensive players and 689 defensive players analyzed
- Pearson’s linear correlation coefficients were used to analyze relationships between combine performance and subsequent NFL on-field performance
Results: Offensive Players

- Statistically significant correlations highlighted below
- Quarter Backs – FYD, TSS, VJ, HJ
- Running Backs – W, TSS
- Wide Receivers – H, W, FYD
- Tight Ends – W
- Offensive Lineman – None

h = height, W = weight, FYD = forty yard dash, TSS = twenty second sprint, VJ = vertical jump, HJ = horizontal jump, BP = bench press
Results: Defensive Players

- Statistically significant correlations highlighted below
- Defensive Backs – FYD
- Defensive Ends – W
- Defensive Tackles – H
- Linebackers – W, FYD

H= height, W= weight, FYD= forty yard dash, TSS= twenty second sprint, VJ= vertical jump, HJ= horizontal jump, BP= bench press
Conclusions

• For certain positions, combine physical testing is associated with improved on-field performance
• It remains difficult to define on-field performance for many positions including the offensive and defensive line
• Combine does NOT appear to predict performance for all positions
• Although there are some statistically significant correlations, many are weak correlations
• Further research needed to analyze relationship between combine and on-field success and how this information could be used to assist athletes preparing for competition and return from injury