# Up There: Do the VFL and VAFLW stats suggest performance in AFL and AFLW?

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## Topic

A common question in Australian rules football is how well state-level (VFL) performance translates into success at the elite level (AFL).

- Raw comparisons between VFL(W) and AFL(W) players are biased: only a subset of VFL(W) athletes are drafted, and they may already differ in age, position, or performance profile.
- Propensity score matching (PSM) provides a way to create comparable groups of players, balancing observed characteristics before comparing outcomes.
- With the fitzRoy R package, researchers can access both AFL(W) and VFL(W) match and player statistics from AFL(W) Tables, making it possible to conduct a rigorous causal-style analysis of talent pathways.

## Plan

1. Use the fitzRoy package to collect historical AFL and VFL player-level data.
2. Construct covariates for VFL players (e.g., disposals, goals, tackles, age, height, position).
3. Use PSM to match VFL players who transition to AFL with similar VFL players who do not.
4. Estimate the "treatment effect" of AFL selection on subsequent performance outcomes, and test whether VFL performance indicators predict AFL success.