SNATCH rummy

RUN LENGTH / UNRESTRICTED VS 5-CARD VS 4-CARD

Capping runs changes play, not balance.

BOTTOM LINE

Four- and five-card run caps made hands slightly longer and shifted play toward more starters and completions, but neither cap improved win balance, scoring, or point spread. Keep runs unrestricted.

+0.34

turns per hand under the 4-card cap (95% CI +0.30 to +0.38)

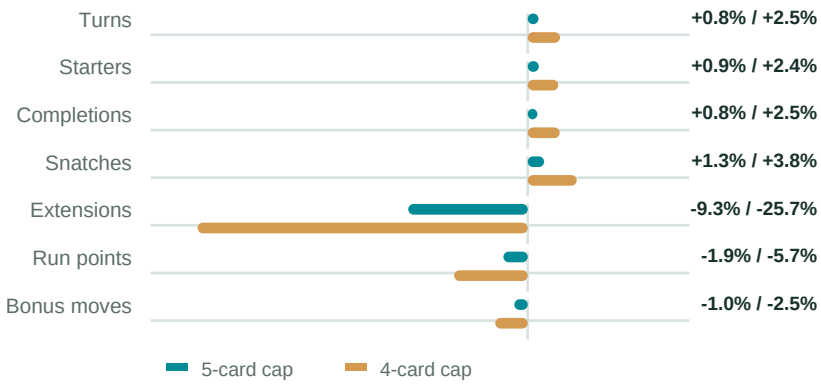
-26%

extensions per match under the 4-card cap

NO

statistically supported improvement in point spread

HOW EACH CAP CHANGED PLAY



WHAT THE CAPS DID

- **Longer by restraint**
  Hands lengthened because developed runs could no longer keep extending.
- **More starter play**
  The 4-card cap added 1.04 starters and 0.56 completions per match.
- **Same competition**
  Win rates, total secured points and match spreads did not clearly improve.

GAME-DESIGN JUDGMENT

The evidence does not justify adding a run cap to the standard game. The four-card cap changes nearly every match; the five-card cap is gentler but still adds a rule without producing a practical competitive benefit.

Statistical evidence

Confidence intervals for win probability, absolute match margin and total secured scoring all included no effect. The increases in turns, starters, completions and snatches were reliable gameplay shifts.

Practical interpretation

A cap can create a coherent starter-and-snatch variant, but it reduces extension flow and makes a physical-table rule harder to remember. If ever offered as a house rule, five cards is the less disruptive choice.

The caps mattered - just not in the hoped-for way

PRIMARY RESULTS

Measure	Unrestricted	5-card cap	4-card cap
Turns per hand	13.67	13.78	14.01
Absolute match spread	134.24	133.90	131.60
Extensions per match	9.54	8.65	7.08
Completions per match	22.26	22.43	22.81
Snatches per match	7.53	7.63	7.82
Partner completions	25.16	25.38	25.89
Secured run points	442.7	434.3	417.3

PAIRED UNCERTAINTY

Paired outcome	Effect	95% confidence interval	Evidence
5-card cap: turns / match	+0.46	+0.37 to +0.55	**Clear increase**
5-card cap: abs. match spread	-0.35	-2.72 to +2.03	**No clear change**
4-card cap: turns / match	+1.38	+1.22 to +1.53	**Clear increase**
4-card cap: abs. match spread	-2.64	-6.47 to +1.19	**No clear change**

HOW OFTEN THE CAPS MATTERED

Under unrestricted rules, 94.0% of matches contained a run longer than four cards and 62.9% contained a run longer than five.

The winning team changed on identical deals in 14.5% of 4-card comparisons and 6.8% of 5-card comparisons. Those switches were balanced between teams.

COMPLETION CHECK

- 6 of 6 balanced partnership blocks complete
- 1,536 paired four-hand matches per condition
- 6,144 hands per condition; 18,432 overall
- Identical seeded deals across all three conditions
- Observed maximum runs: 11 unrestricted, 5 and 4

METHOD AND INTERPRETATION

Four bot styles (Bob, Tactician, Runner and Setter) were distributed across six ordered partnership blocks. Dealers rotated through all seats and teammate seat order was counterbalanced. Every condition received the same seeded deal for each hand. All matches used nine-card hands, Fixed Jokers, Negative Jokers Off, End-of-Next-Turn exposure and Snatcharama Last Lap. Only the maximum legal completed-run length differed. Source commit: 09fb98a48204b0802fee53d9ffe5d412e4ee3170.