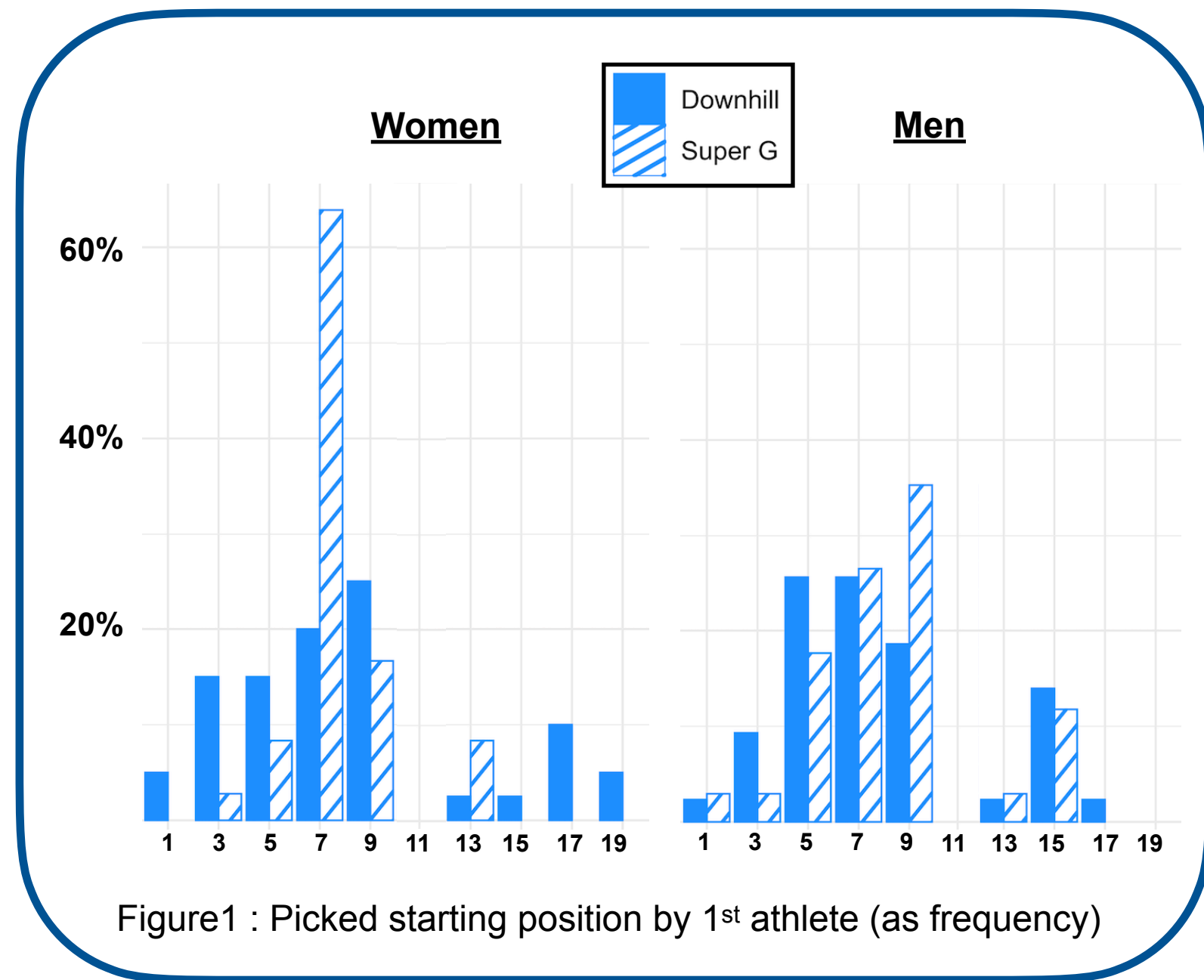


Impact of the revised starting lottery in the alpine speed events on performance of the top athletes

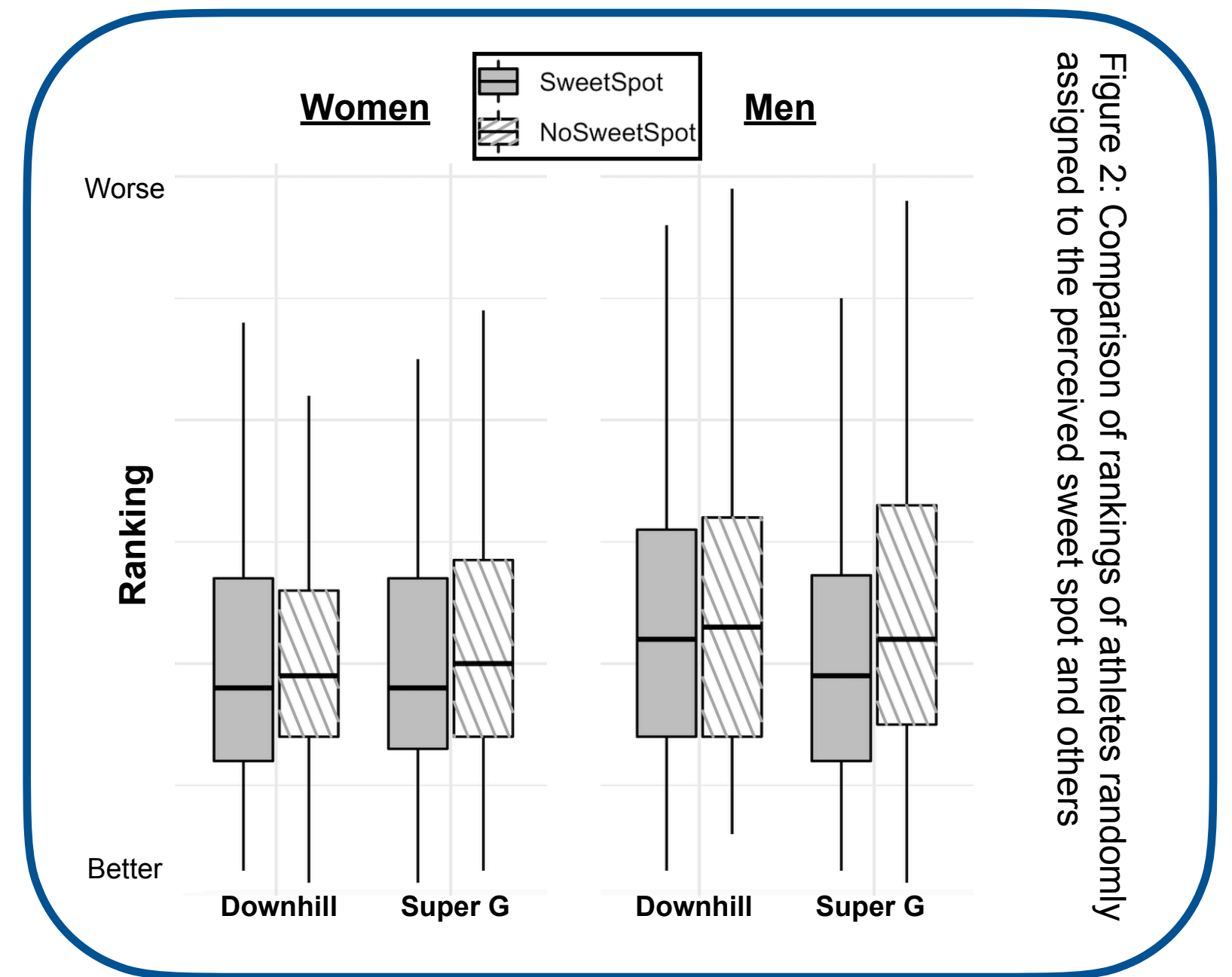


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Before the 2016/17 season, the FIS conducted major changes to its starting lottery. As part of this change, the top seeded athletes from then on were able to pick a starting position. This affected **three intriguing research questions** that we examined based on a **sample of 322 races (17725 individual performances) from 10 seasons**:



- 1st: Which starting positions do top athletes prefer?**
- Top athletes could pick an odd nr < 20
 - Top athletes showed heavy preference to start at position 5, 7 or 9 (**perceived sweet spot**)
 - These positions have previously been starting positions for athletes with lower rankings
- 2nd: Are these starting position advantageous?**
- FIS randomly assigned racers ranked 11-20 in WC to even nr ≤ 20
 - **Racers assigned close to perceived sweet spot, tend to perform better** in speed events



3rd: With top athletes picking starting spots that seem to be advantageous, has there been a shift of competitive balance after 2016/17?



Slight increase of competitive balance

Top 7 in Super G performed significantly worse

Athletes ranked 23-30 in WC performed significantly worse in all speed disciplines (Can not be assigned to starting positions 1-7 anymore)

Slight decrease of competitive balance

Top 7 in both speed disciplines performed significantly better

