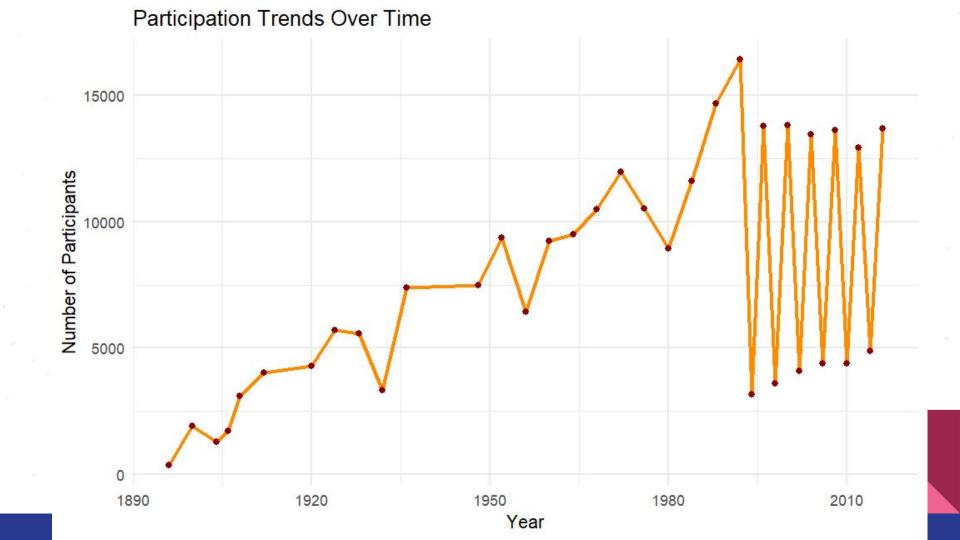


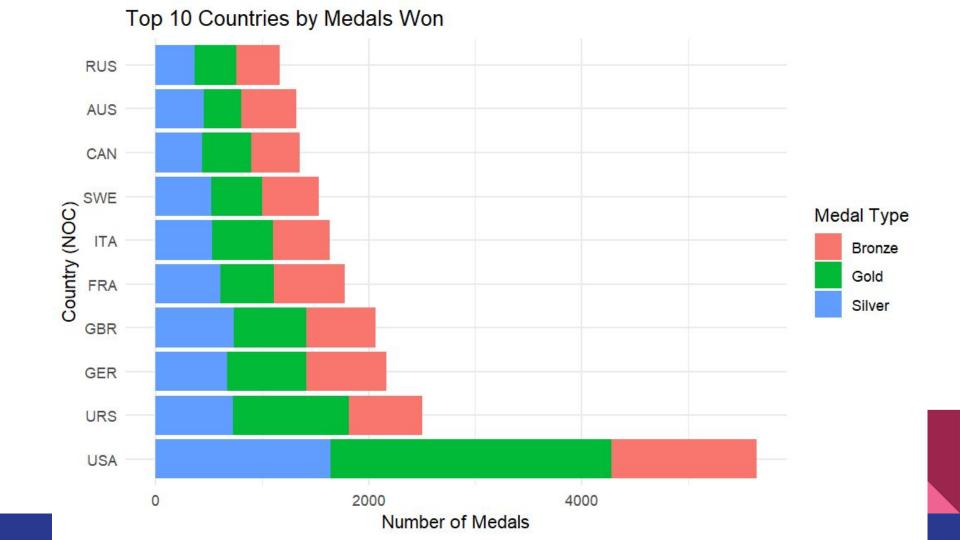
Introduction

- Olympic data ← TidyTuesday
- Examined Sports:
 - Shooting, Rowing, Football, Swimming, Alpine Skiing, Cross Country Skiing, Figure Skating, Speed Skating
- Examined Variables:
 - Participation
 - Height, Weight, Age, Gender
 - Country
 - Medals

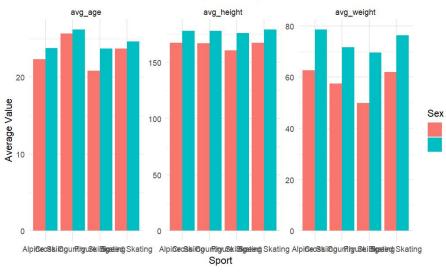


Top 10 Sports by Number of Participants Athletics Gymnastics Swimming Shooting Cycling Fencing Rowing Cross Country Skiing Alpine Skiing Wrestling 10000 20000 30000 40000 Number of Participants

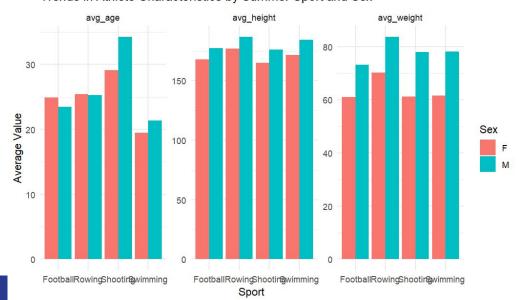


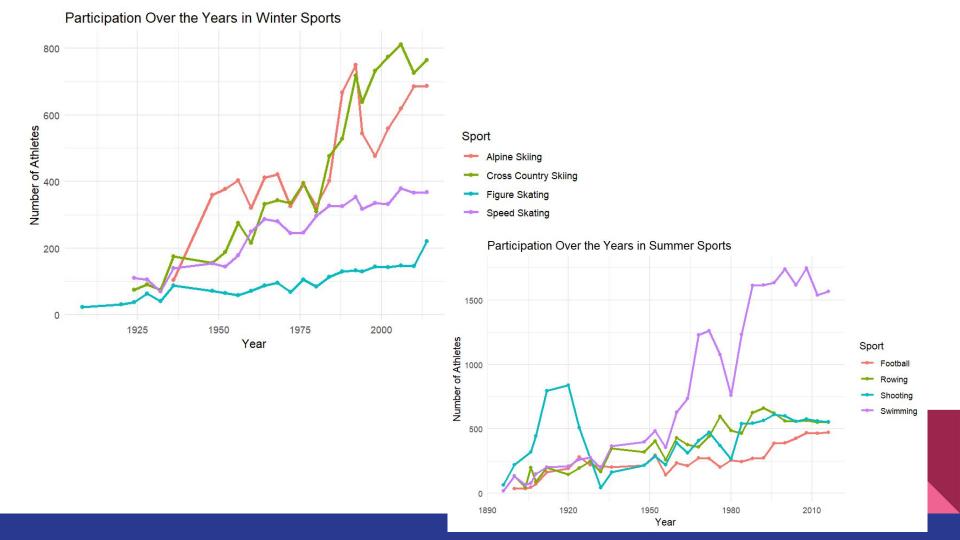


Trends in Athlete Characteristics by Winter Sport and Sex



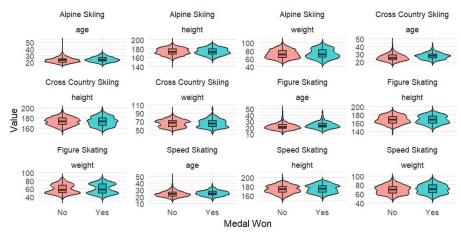
Trends in Athlete Characteristics by Summer Sport and Sex





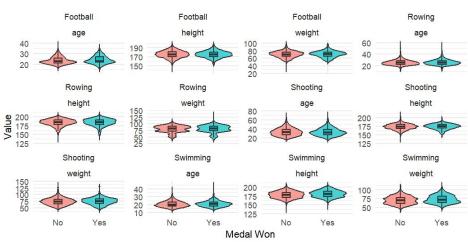
Comparison of Physical Attributes by Medal Status on Winter Sport

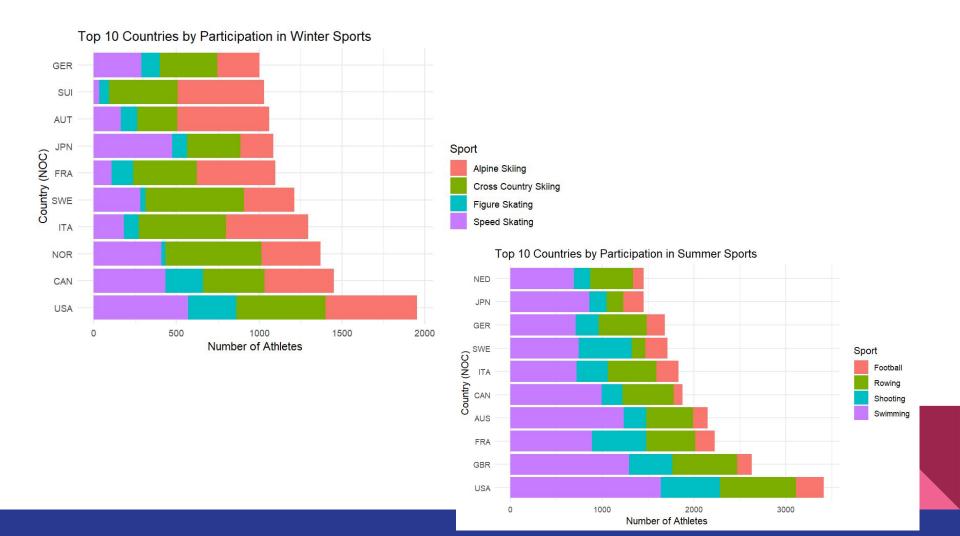


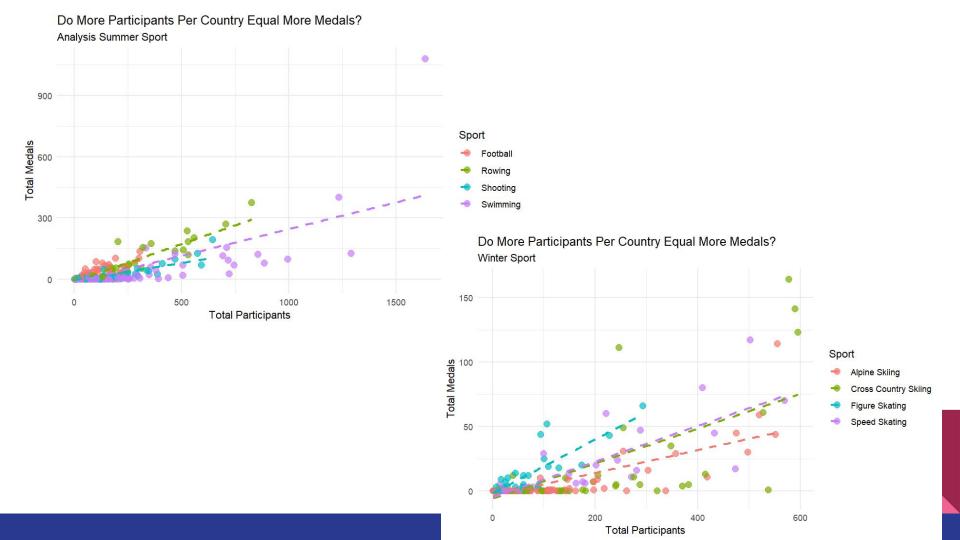


Comparison of Physical Attributes by Medal Status on Summer Sport



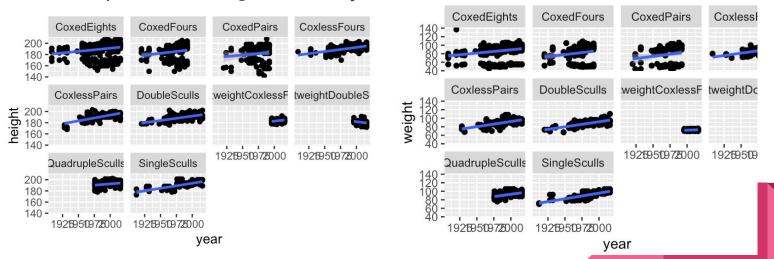






Effect from Event

There exist large differences between events in some sports, for example, rowing, which includes restrictions to the weight of the athletes. For rowing, higher weight means huge dominance in the match. The age of shooting athletes is also affected by events a lot, where younger athletes will have obvious dominance in events that requires running while they don't have have this dominance in other.



Height and weight vs year for male rowing altheletes

Conclusion

Summer Sports:

- Swimming: Highest participation, consistent growth.
- USA: Leads in athletes and medals.
- Rowing & Shooting: Steady growth.
- Football: Regionally concentrated popularity.

Winter Sports:

- Key Sports: Alpine & Cross-Country Skiing.
- Top Nations: Norway, Canada, USA (geographic advantage).
- **Trends**: Slow but steady global growth.

Overall:

- **Participation**: Summer > Winter.
- **Success Factors**: Investment, infrastructure, athlete development.

