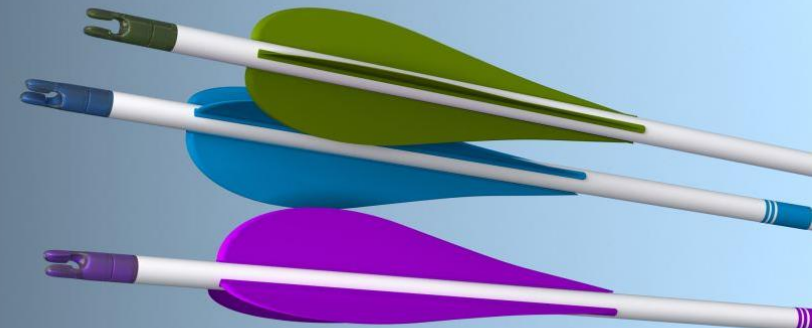




**OLYMPICS INSIGHTS**

This SQL project analyzes Olympic sports data, examining country performance across various sports in summer and winter games. It also explores medal distribution by gender and age, revealing demographic patterns. Valuable insights from this project can inform strategic decisions for sports federations, Olympic committees, and sponsors. By understanding which sports resonate with different demographics, it facilitates resource allocation and athlete development. The project caters to sports enthusiasts, analysts, and marketing professionals seeking insights into Olympic sports dynamics.



# HYPOTHESIS

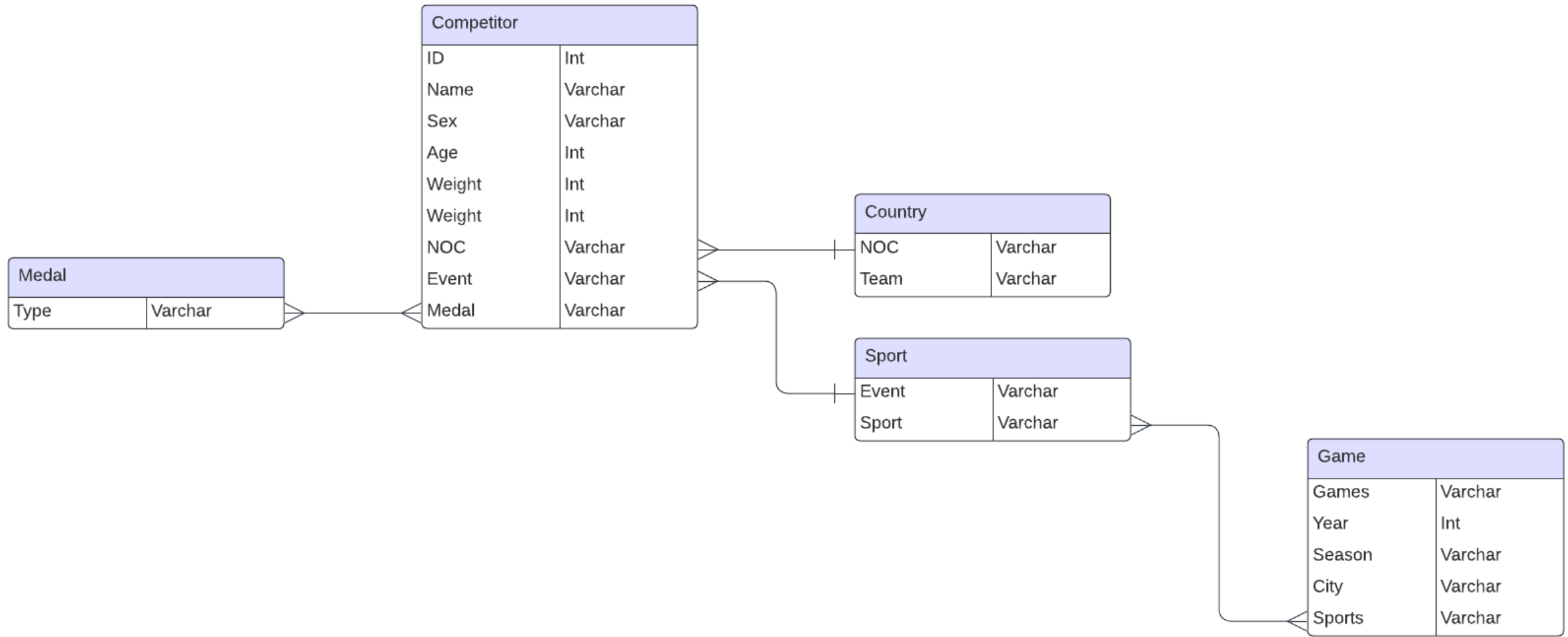
Certain countries may exhibit a consistent dominance in specific sports across both summer and winter Olympic games. For example, countries with a strong tradition in winter sports may perform exceptionally well in disciplines like skiing or ice hockey during the Winter Olympics.





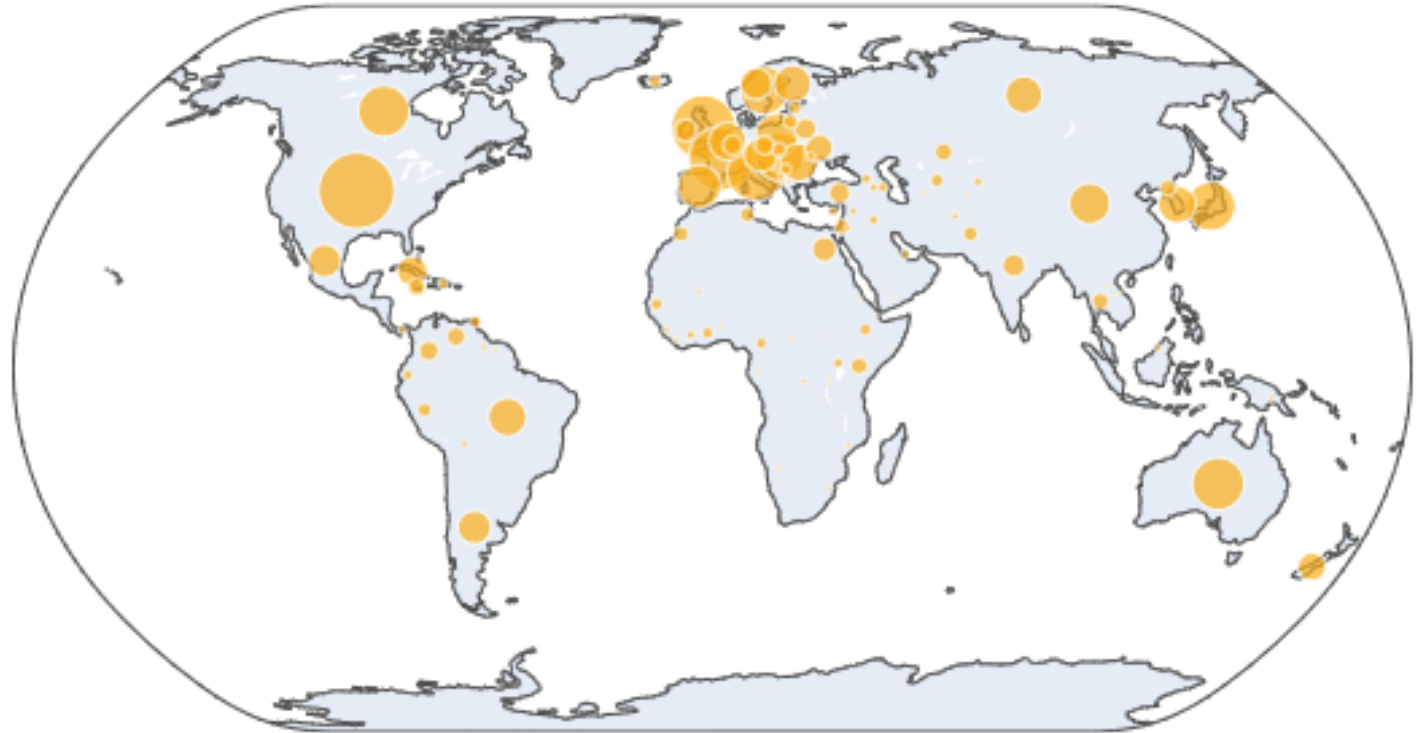
## ADDITIONAL QUESTIONS

1. How does the distribution of medals across different sports vary between summer and winter Olympic games?
2. What are the age and gender demographics of athletes who tend to win the most medals, and does this vary by sport?
3. Are there any notable trends or correlations between a country's overall medal count and its performance in specific sports, both in summer and winter games?

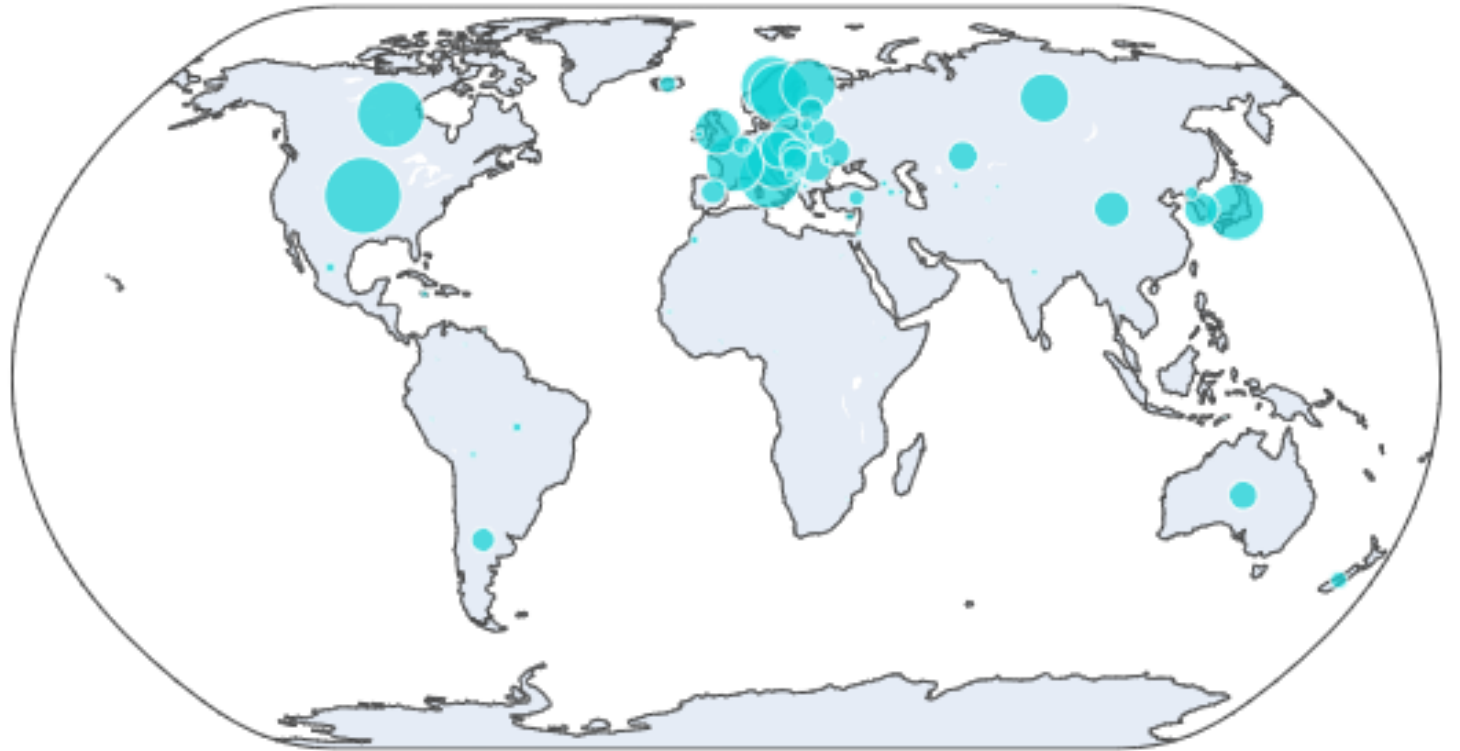




# SUMMER ATHLETES



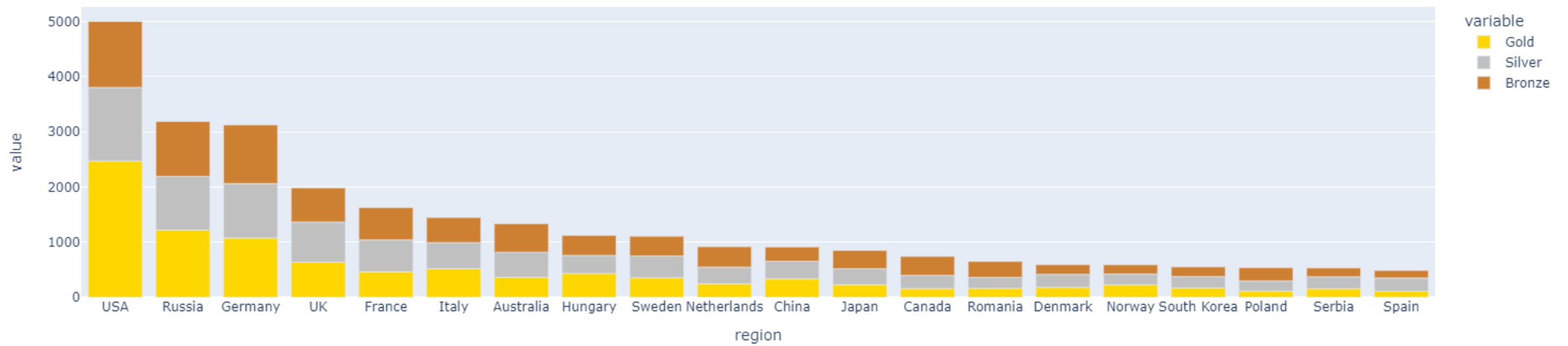
# WINTER ATHLETES



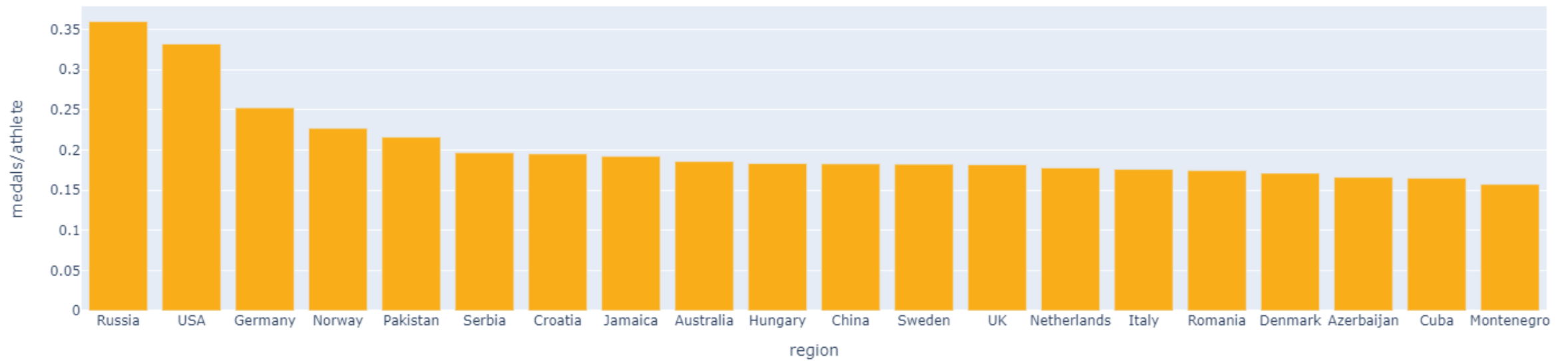
- When it comes to national representation, the United States, Great Britain, and France boast the highest number of athletes in the Summer Olympics, while the Winter Olympics see dominance from the United States, Canada, and Italy.
- Geographically, most Winter Olympic athletes hail from the northern hemisphere, though outliers like Argentina, Australia, and New Zealand also participate actively.



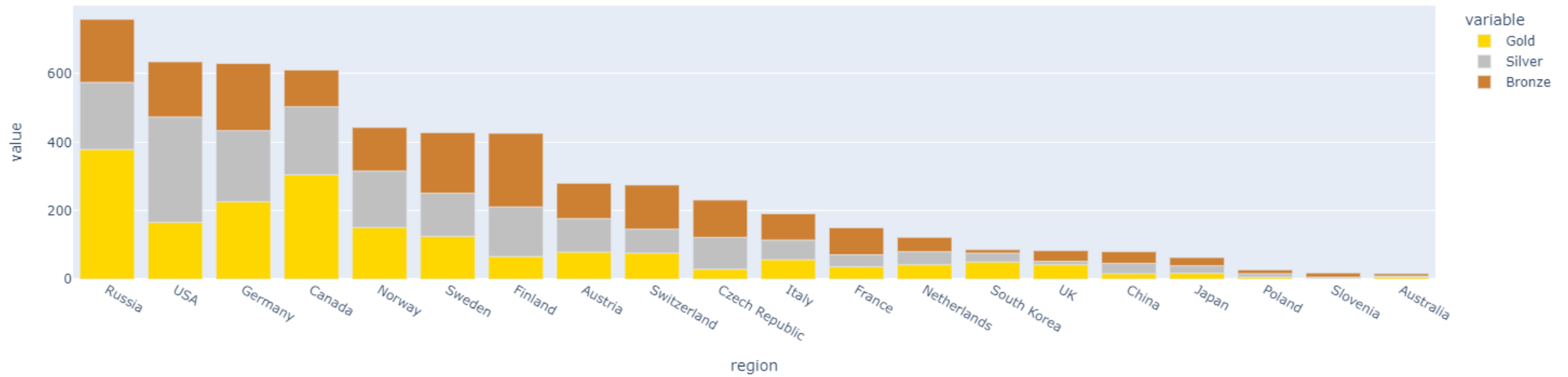




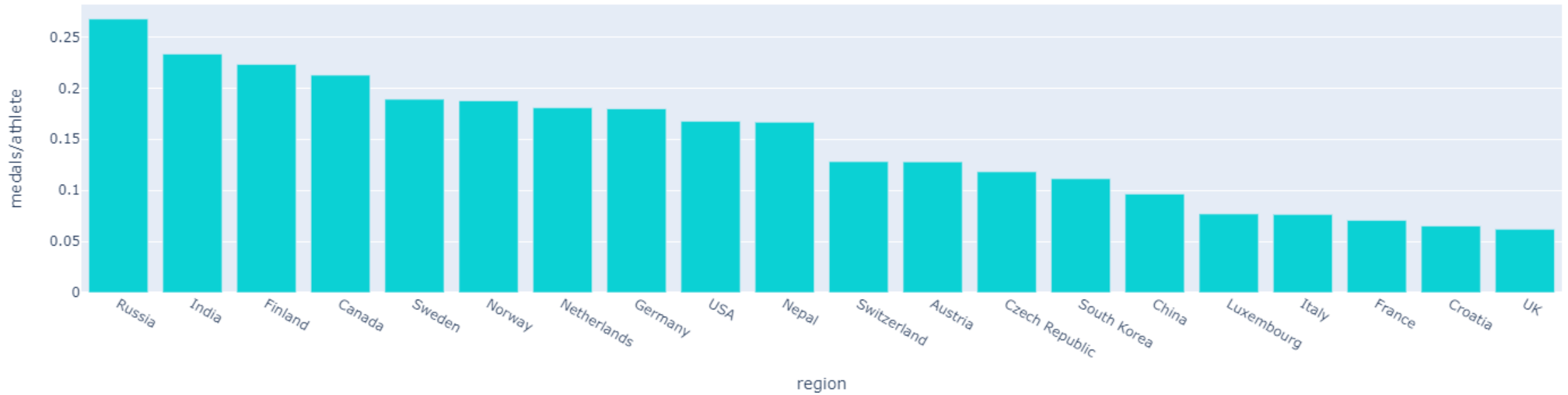
# SUMMER MEDALS



**RATIO: SUMMER  
MEDALS/ATHLETES**



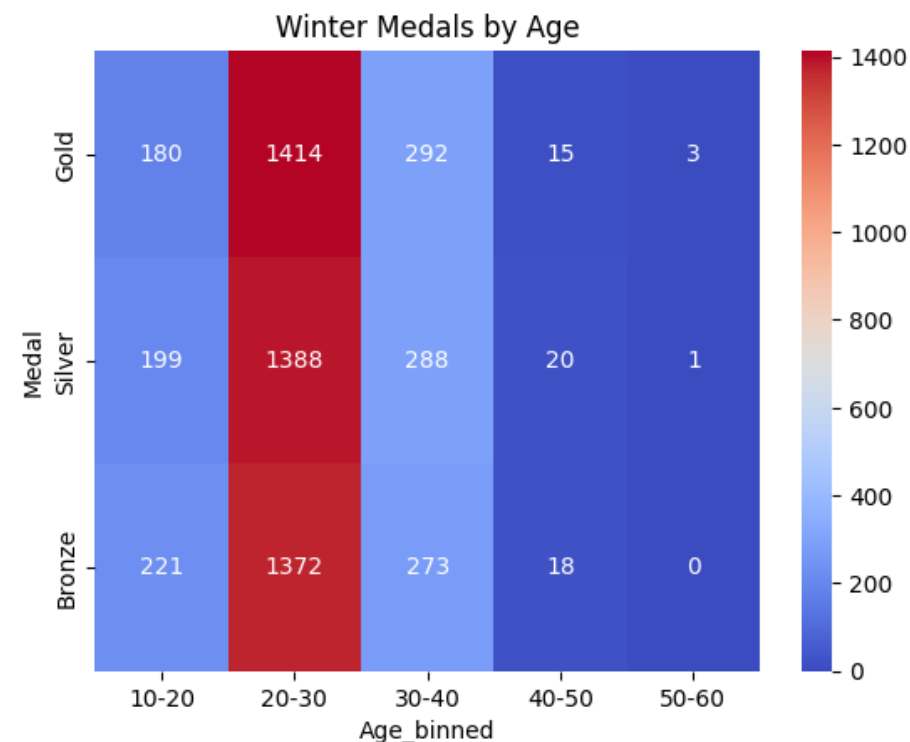
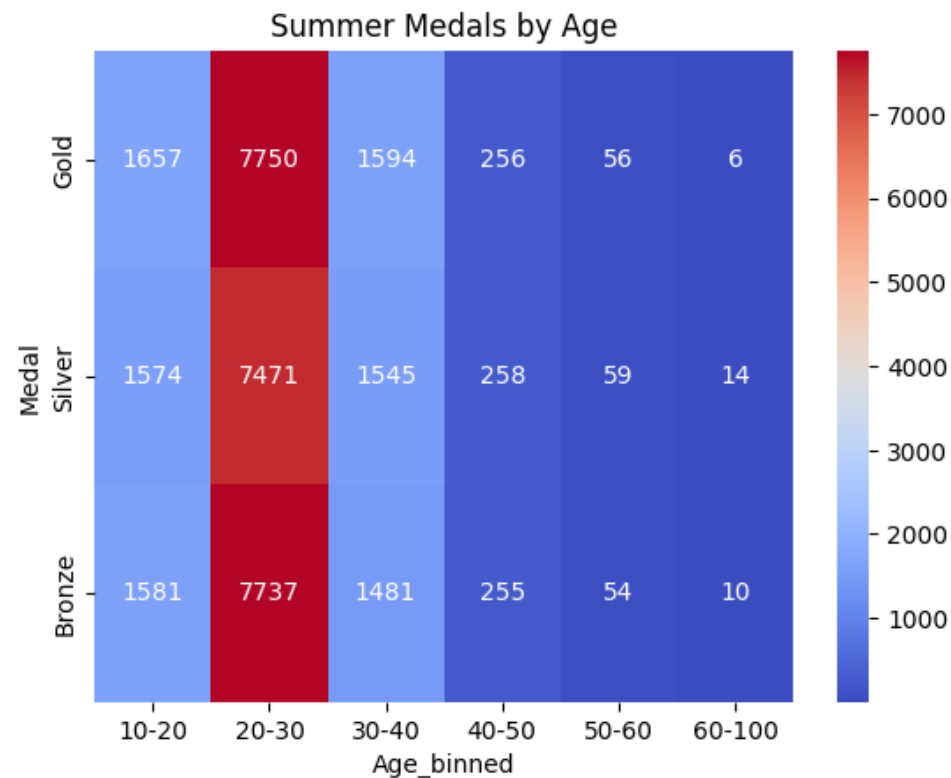
# WINTER MEDALS



**RATIO: WINTER  
MEDALS/ATHLETE**

- In terms of medal tallies, the top three countries in the Summer Olympics are the USA, Russia, and Germany. Meanwhile, in the Winter Olympics, Russia leads the pack, followed closely by the USA and Germany.
- An intriguing metric emerges when examining the ratio of total medals to total athletes per country. While Russia, the USA, and Germany maintain their dominance in the Summer Olympics, the Winter Games witness an unexpected shift, with Russia, India, and Finland boasting the most efficient medal-per-athlete ratios. India's prowess in winter sports, particularly Alpinism, stands out, while Finland's strength lies in traditional winter disciplines like Ice Hockey, Ski Jumping, and Cross Country Skiing.
- Finally, the top three countries in terms of gold medals reflect their prowess in specific sports. In the Summer Olympics, the USA dominates in Swimming, Germany excels in Rowing, and Russia shines in Gymnastics. Meanwhile, in the Winter Olympics, Canada, Russia, and the USA dominate the podium in Ice Hockey.





In both Summer and Winter Olympics, athletes aged between 20-30 years tend to win the highest number of medals across all categories. There's a consistent decline in medal counts as athletes get older, regardless of the type of Olympics (Summer or Winter). The age distribution seems to have a similar impact on medal performance in both types of Olympics, with athletes in their 20s being the most dominant group.

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# SUMMER RATIO MALE/FEMALE

	Sport	F	M	Ratio
0	Boxing	72.0	5974.0	82.972222
1	Wrestling	304.0	6850.0	22.532895
2	Motorboating	1.0	16.0	16.000000
3	Modern Pentathlon	164.0	1513.0	9.225610
4	Art Competitions	377.0	3201.0	8.490716

	Sport	F	M	Ratio
0	Badminton	728.0	708.0	0.972527
1	Trampolining	76.0	76.0	1.000000
2	Triathlon	263.0	266.0	1.011407
3	Rugby Sevens	148.0	151.0	1.020270
4	Taekwondo	299.0	307.0	1.026756

# WINTER RATIO MALE/FEMALE

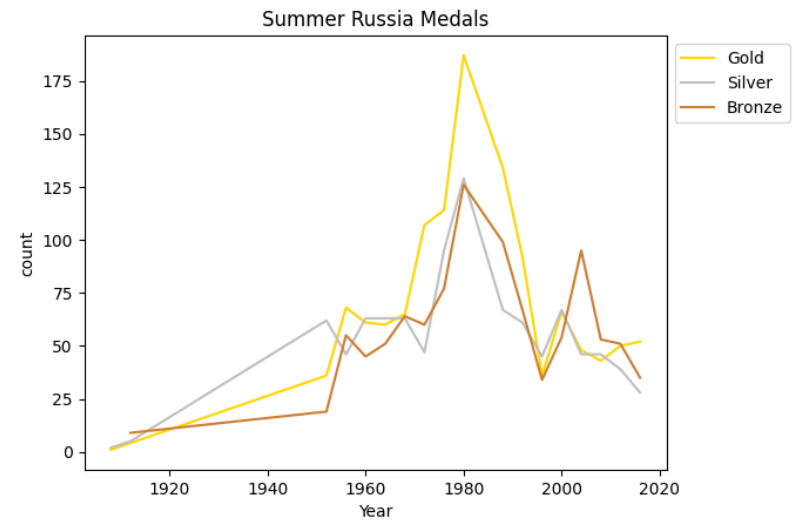
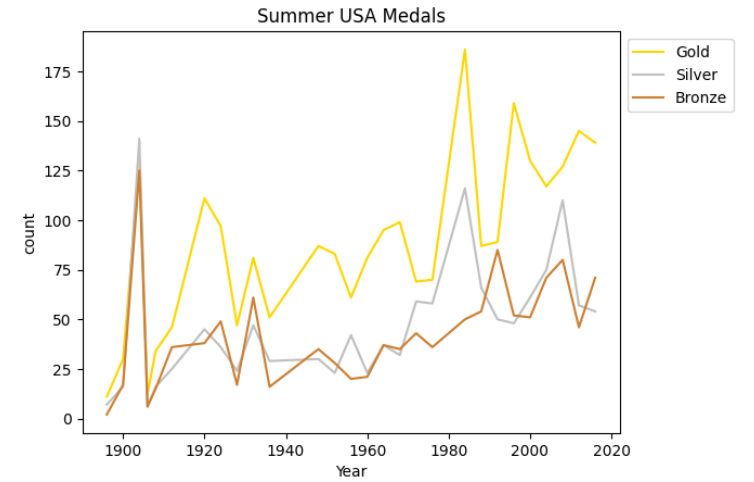
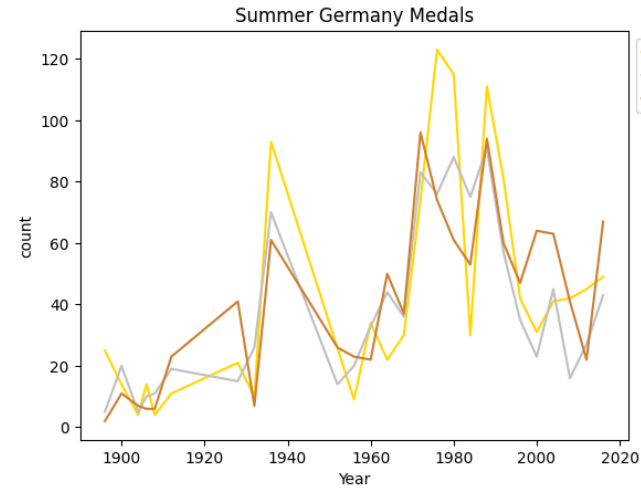
	Sport	F	M	Ratio
0	Ski Jumping	30.0	2371.0	79.033333
1	Bobsleigh	143.0	2915.0	20.384615
2	Ice Hockey	754.0	4702.0	6.236074
3	Luge	377.0	1102.0	2.923077
4	Skeleton	66.0	133.0	2.015152

	Sport	F	M	Ratio
0	Figure Skating	1150.0	1094.0	0.951304
1	Short Track Speed Skating	761.0	773.0	1.015769
2	Curling	222.0	241.0	1.085586
3	Freestyle Skiing	433.0	504.0	1.163972
4	Snowboarding	416.0	520.0	1.250000

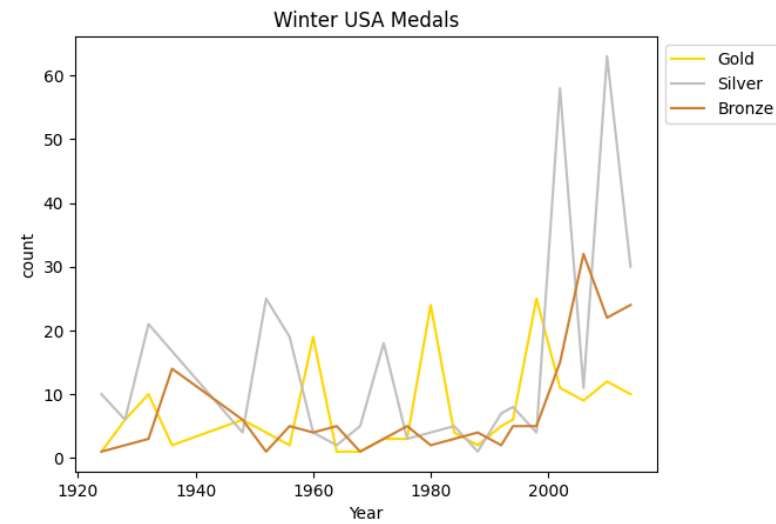
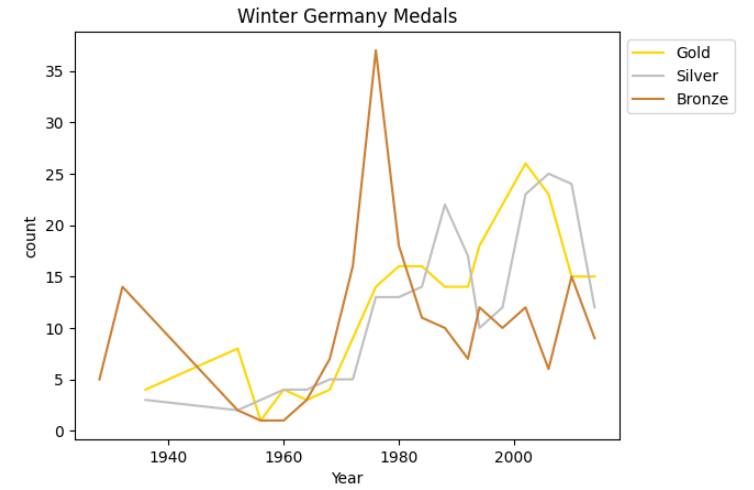
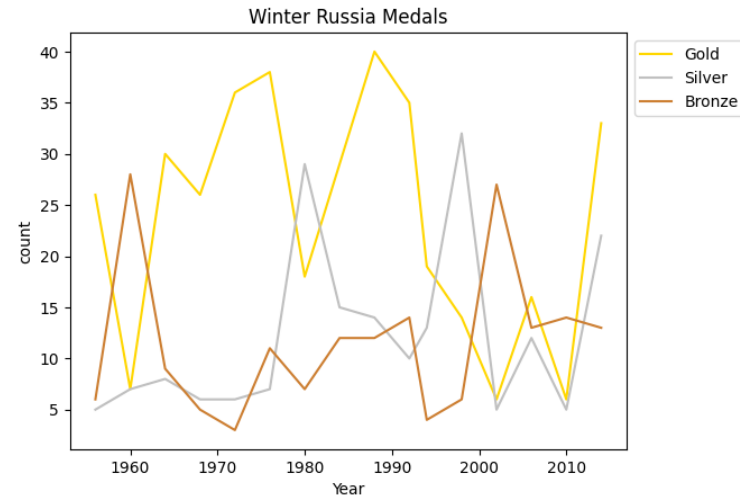


- In both Summer and Winter Olympics, certain sports exhibit a significant gender disparity, with some heavily favoring male participation (e.g., Boxing, Ski Jumping) and others showing a preference for female participation (e.g., Badminton, Figure Skating).
- However, there are also sports where the gender gap is narrower, with almost equal representation of both genders or with only a slight skew towards one gender (e.g., Trampolining, Triathlon, Curling).
- These variations in gender representation across different sports highlight the complex interplay of factors such as cultural norms, historical participation trends, and athletic requirements specific to each sport.

# SUMMER TOP COUNTRIES



# WINTER TOP COUNTRIES



During the Summer Olympics, the United States saw remarkable peaks in medal performance in 1904, 1932, and 1984. The 1904 Olympics were held in St. Louis, USA, where American athletes showcased their dominance across various sports. In 1932, Los Angeles, USA, hosted the Olympics, providing American athletes with a home advantage, resulting in a significant medal haul. The peak in 1984 coincides with the Los Angeles Olympics, where Team USA's success was celebrated on home soil, further fueling the nation's sporting pride.

Russia's notable peak in medal performance during the Summer Olympics occurred in 1980, when Moscow, Russia, hosted the Games. The strong showing by Soviet athletes on home turf contributed to a memorable Olympic Games for the nation.

Germany's exceptional performances in the Summer Olympics, particularly in 1936 and 1972, were highlighted during the Berlin Olympics and the Munich Olympics, respectively, where German athletes excelled in front of their home audiences, showcasing the nation's athletic prowess on the world stage.





# HYPOTHESIS ANALYSIS

The hypothesis that certain countries maintain a consistent dominance in specific sports across both the Summer and Winter Olympics is indeed supported by the data analysis conducted. This pattern highlights the deep-rooted traditions and strengths that certain nations possess in particular athletic endeavors.

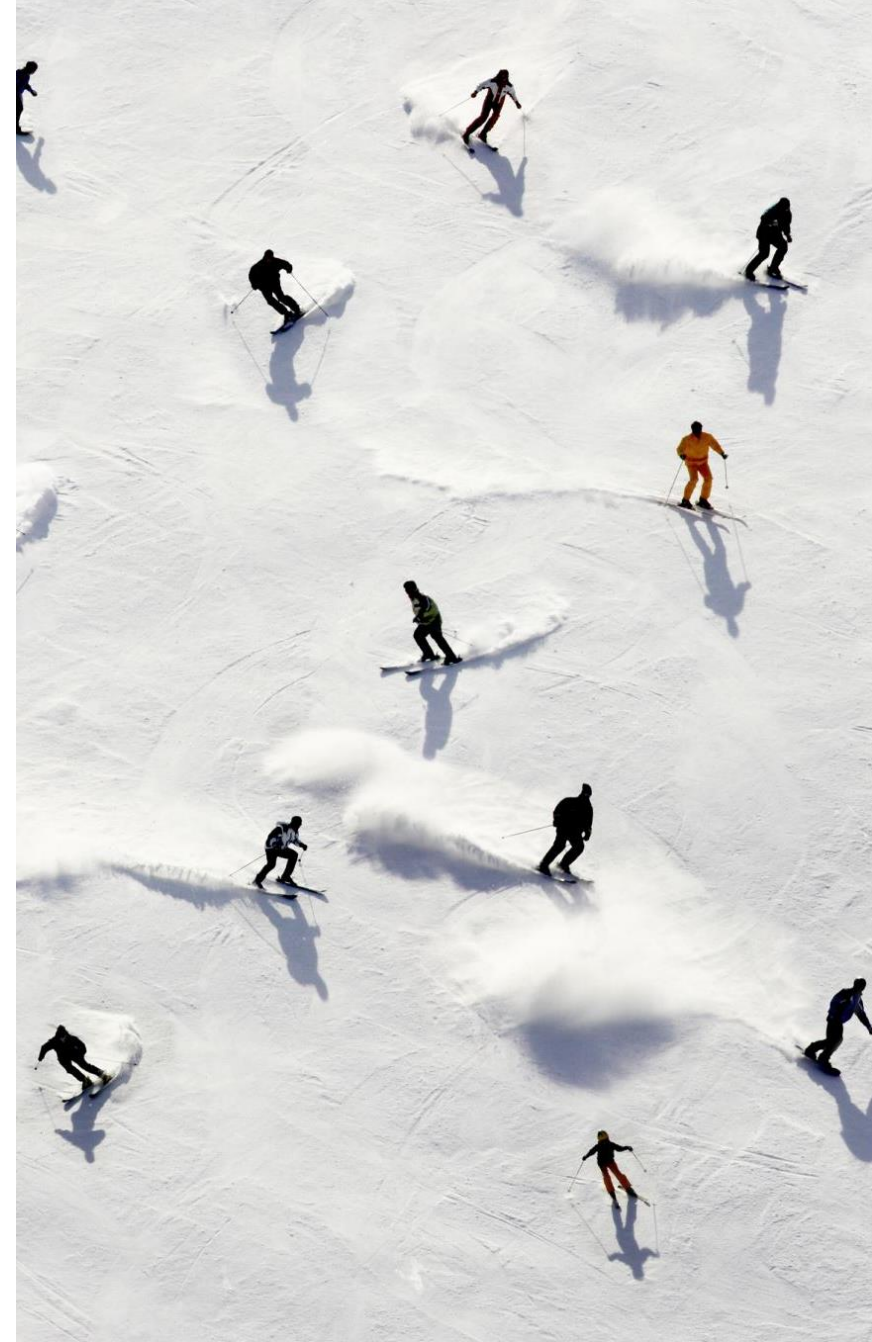
One of the most prominent examples of this phenomenon is evident in the realm of winter sports. Countries with a rich heritage and infrastructure in winter sports, such as Finland, Canada, and Russia, consistently excel in disciplines like Ice Hockey, Ski Jumping, and Cross Country Skiing. This dominance extends across multiple editions of the Winter Olympics, showcasing the enduring prowess of these nations in these specialized events.

Similarly, in the Summer Olympics, we observe certain countries consistently leading the medal tables in specific sports. The United States, for instance, has historically been dominant in Swimming, while Germany has showcased remarkable strength in Rowing. Russia's stronghold in Gymnastics further exemplifies this trend.

This consistency in performance can be attributed to various factors, including robust training programs, cultural emphasis on certain sports, and investment in infrastructure. For countries with a strong tradition in winter sports, the availability of suitable terrain and facilities plays a crucial role in nurturing talent and fostering excellence.

Furthermore, the specialization of athletes and coaches in particular sports over generations contributes to the sustained success of these nations. By focusing resources and efforts on disciplines where they have a competitive advantage, countries can maintain their position at the forefront of Olympic competition.

Overall, the data analysis supports the hypothesis that certain countries exhibit a consistent dominance in specific sports across both the Summer and Winter Olympics. This trend underscores the enduring legacy of athletic excellence and the profound impact of cultural heritage and investment in sports development.





THANK YOU