# Sports Analytics I

Produced by Dr. Mario
UNC STOR 538

# Survey on Sports

## Complete the …

[Survey](#)
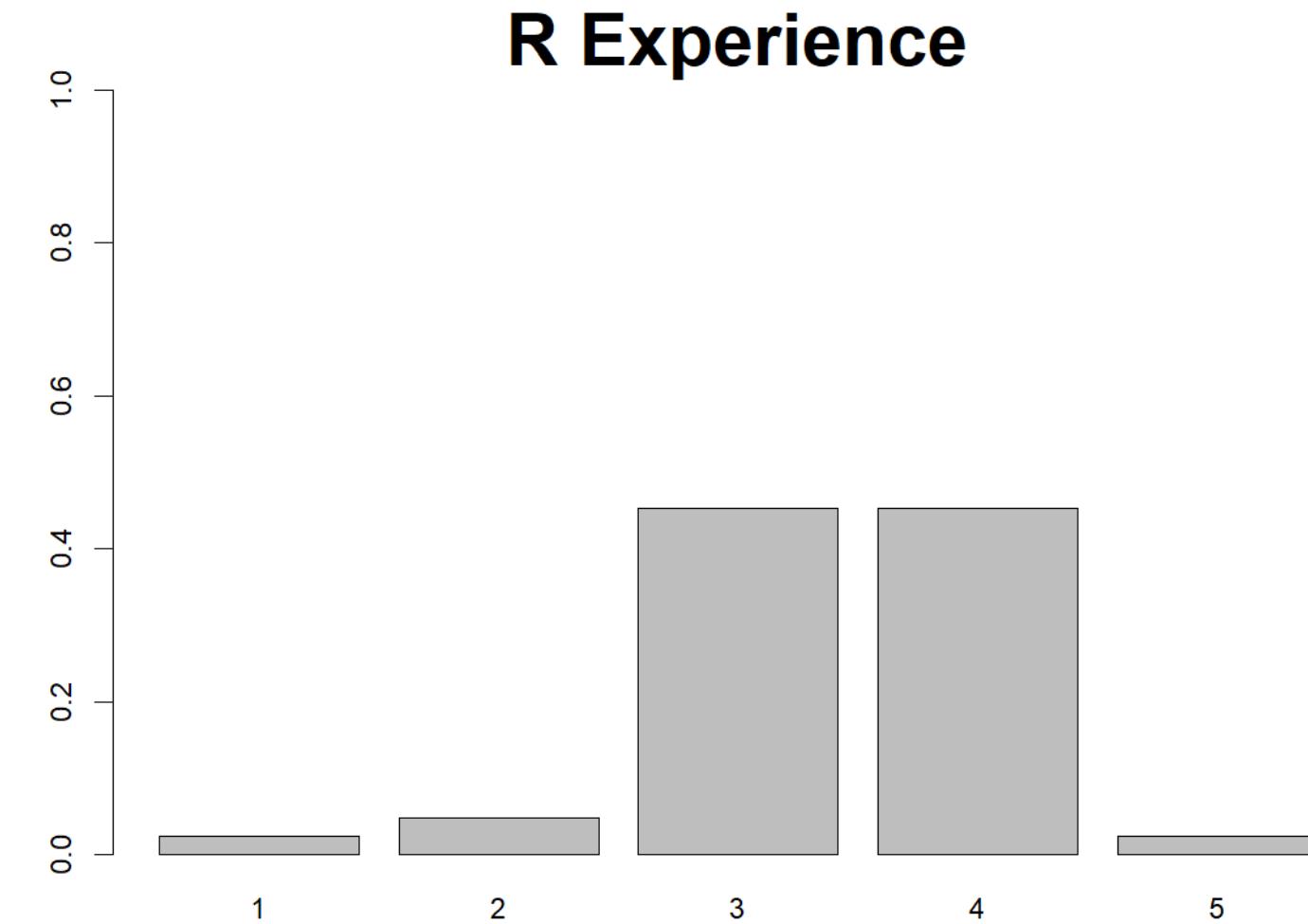
# Survey Results: Demographics
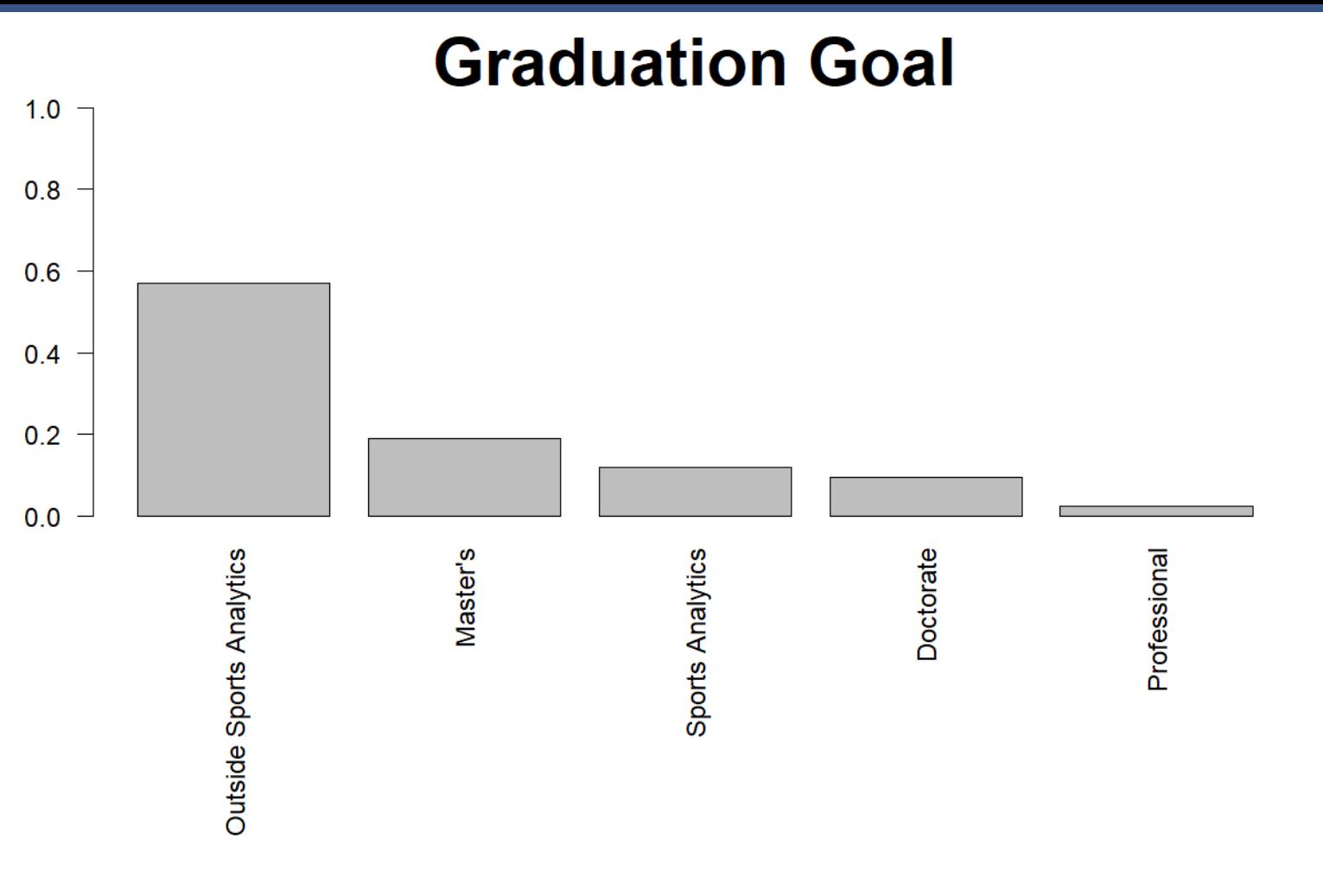
- 42 Responses (Thank You!!)

- Seniors (14/42)

- Juniors (18/42)

- Sophomores (9/42)

- Other (1/42)
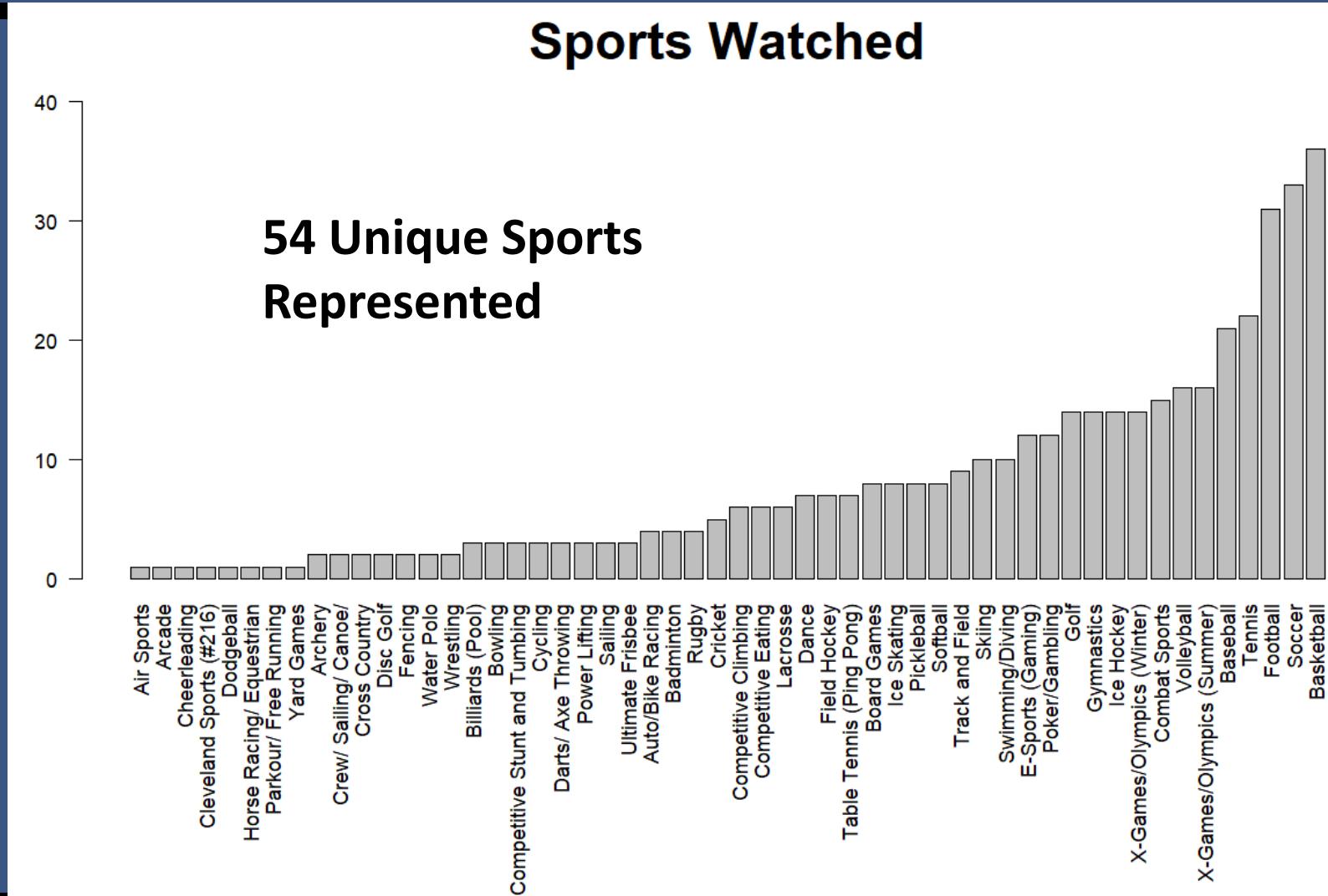
# Survey Results: R Experience
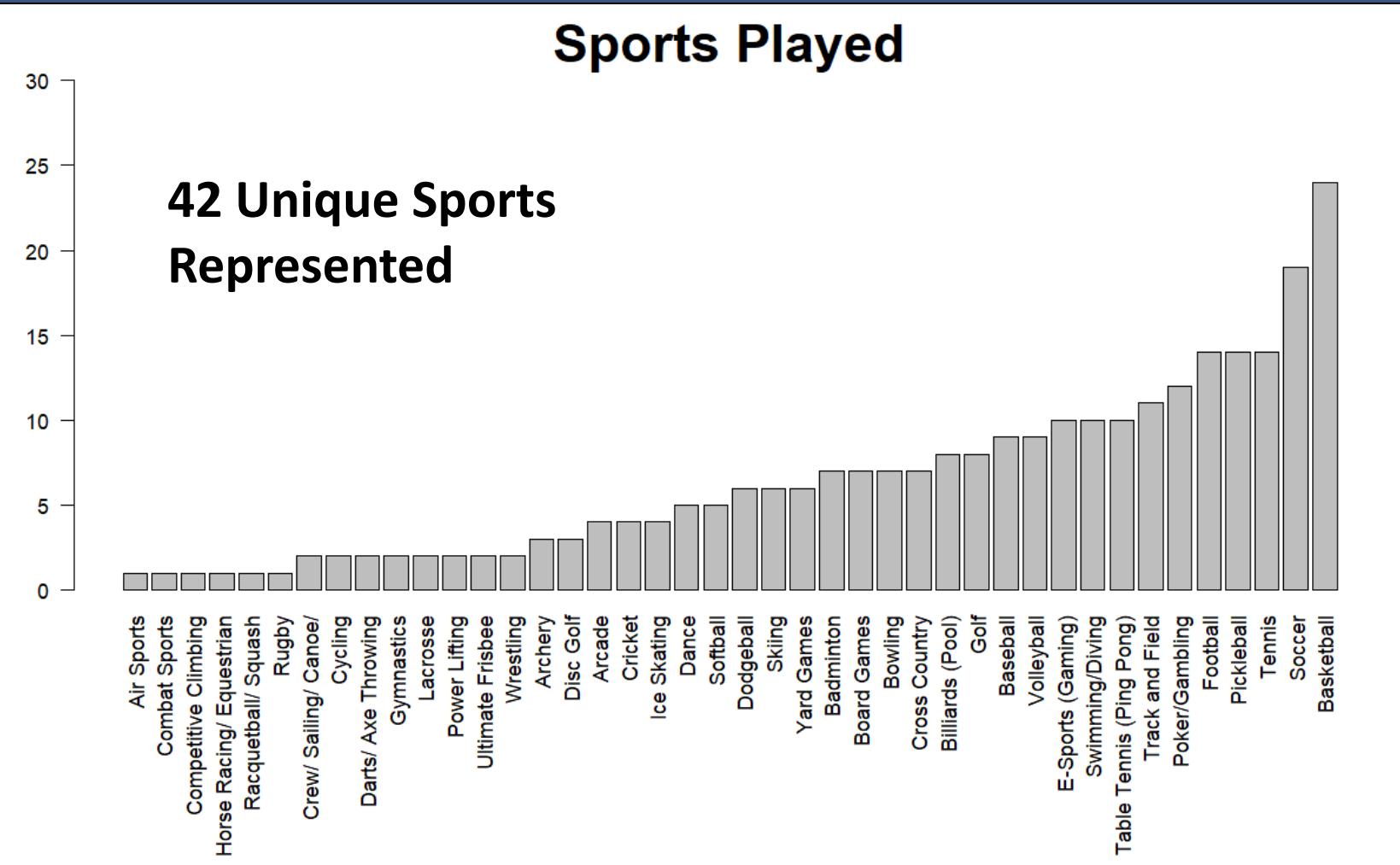
# Survey Results: Goal After Graduation
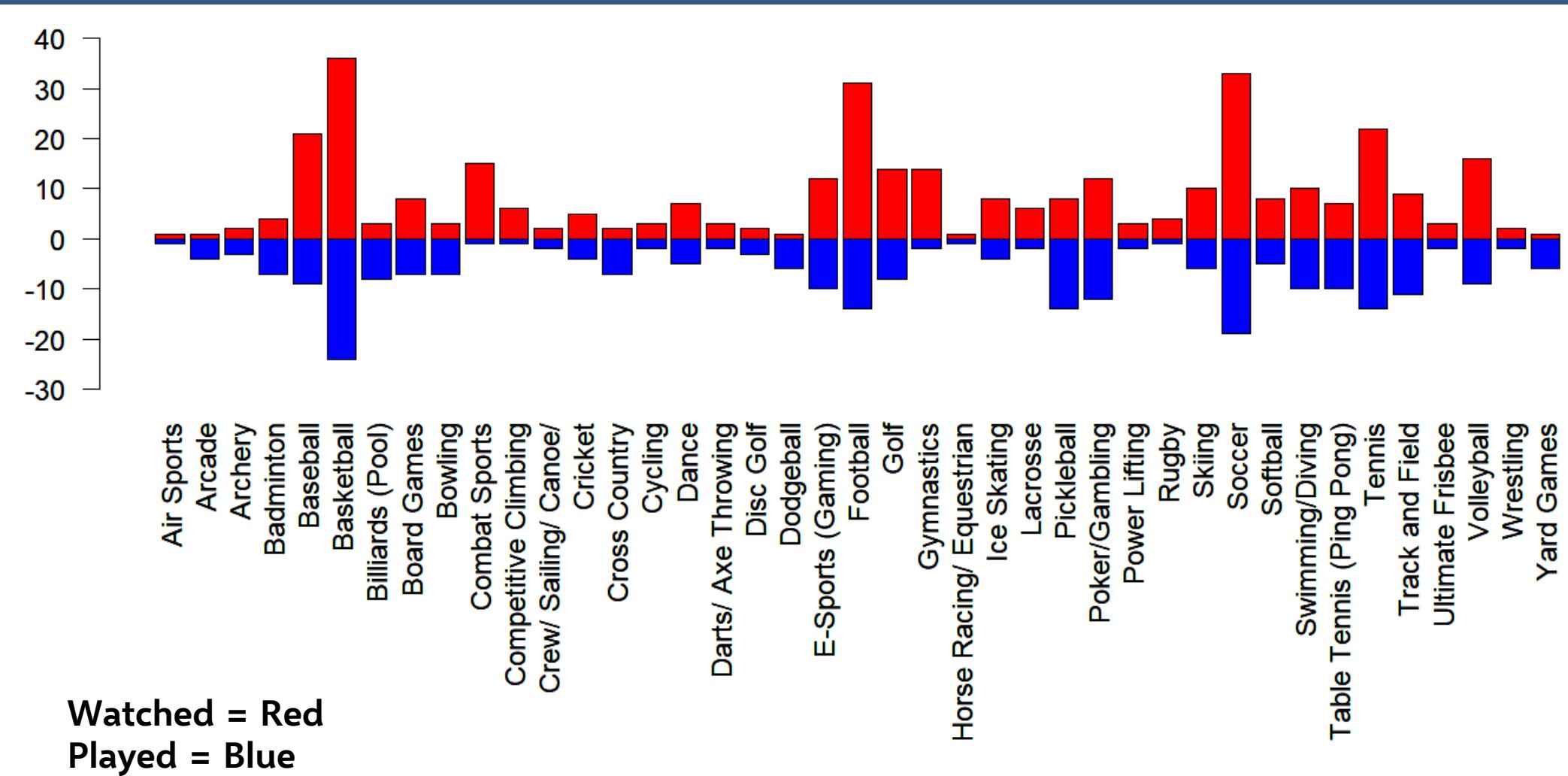
# Survey Results: Watched



Sports Watched

54 Unique Sports Represented

# Survey Results: Played



## Sports Played

42 Unique Sports Represented

# Survey Results: Combined



Watched = Red
Played = Blue

# Current Landscape of Sports

- **Most Popular World Sports (hdled.com)**
  - **"Ranked Based Off Global Popularity, Media Coverage, and Cultural Significance"**
  - **From Most Popular to Least Popular**
    - **Soccer**
    - **Cricket**
    - **Basketball**
    - **Tennis**
    - **Hockey (Field and Ice)**
    - **American Football**
    - **Baseball**
    - **Golf**
    - **Table Tennis**
    - **Volleyball**

# Current Landscape of Sports



- ## Most Popular World Sports (worldatlas.com)
  - ### Based on Number of Fans

| Rank | Sport Name | Amount of Fans | Regions |
|------|------------|----------------|---------|
| 1 | Football (Soccer) | 3.5 Billion | Europe, Africa, Asia, America |
| 2 | Cricket | 2.5 Billion | Asia, Australia, UK |
| 3 | Hockey | 2 Billion | Europe, Africa, Asia, Australia |
| 4 | Tennis | 1 Billion | Europe, Asia, America |
| 5 | Volleyball | 900 Million | Europe, Australia, Asia, America |
| 6 | Table Tennis | 850 Million | Europe, Africa, Asia, America |
| 7 | Basketball | 800 Million | America, Oceania, Middle East |
| 8 | Baseball | 500 Million | America, Japan |
| 9 | Rugby | 475 Million | Oceania, South Africa, England |
| 10 | Golf | 450 Million | America, Oceania, Europe |
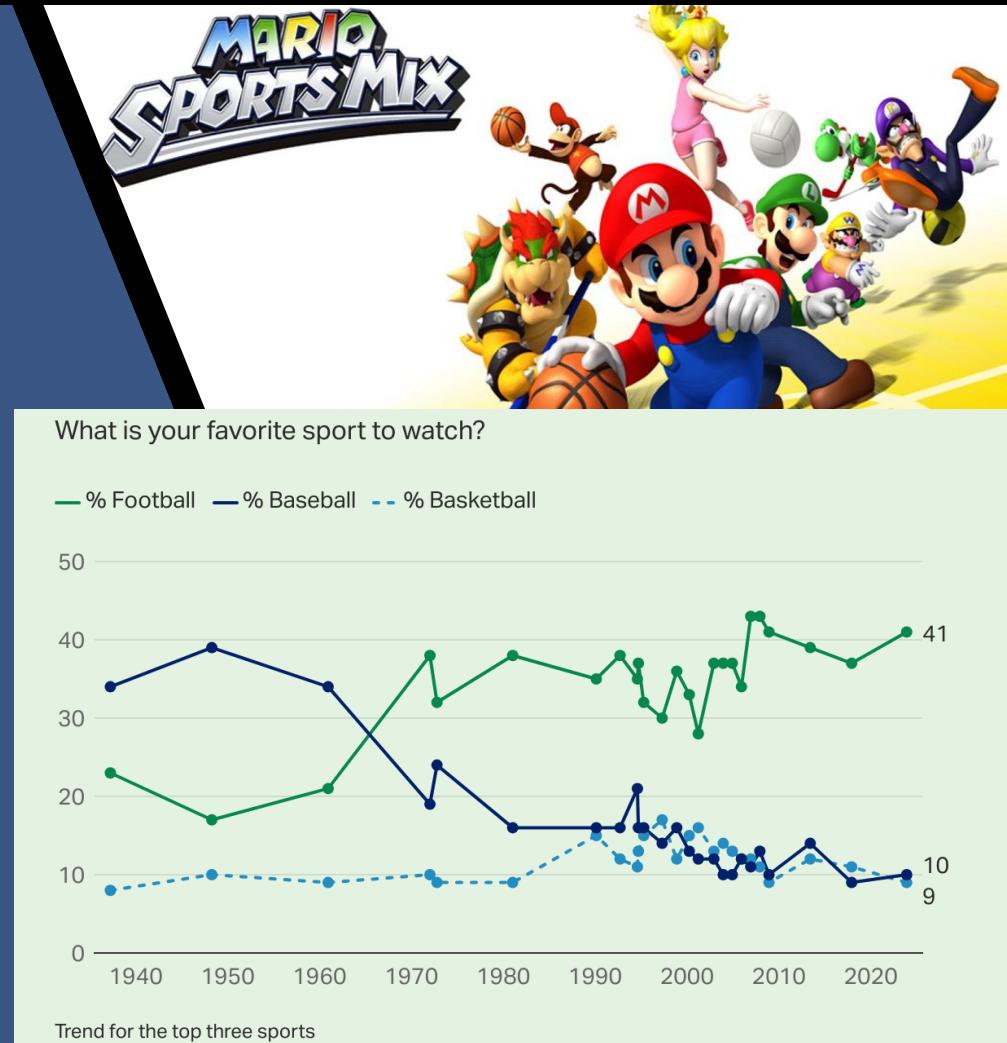
# Current Landscape of Sports

- **Most Popular World Sports (biggestglobalsports.com)**
  - **Ranking of Top 5**
    - Football
    - Basketball
    - Tennis
    - Cricket
    - Baseball
  - **Gives Rationale for Metric But No Formula**
  - **Discusses Data Without Providing the Data or Preview of Data**
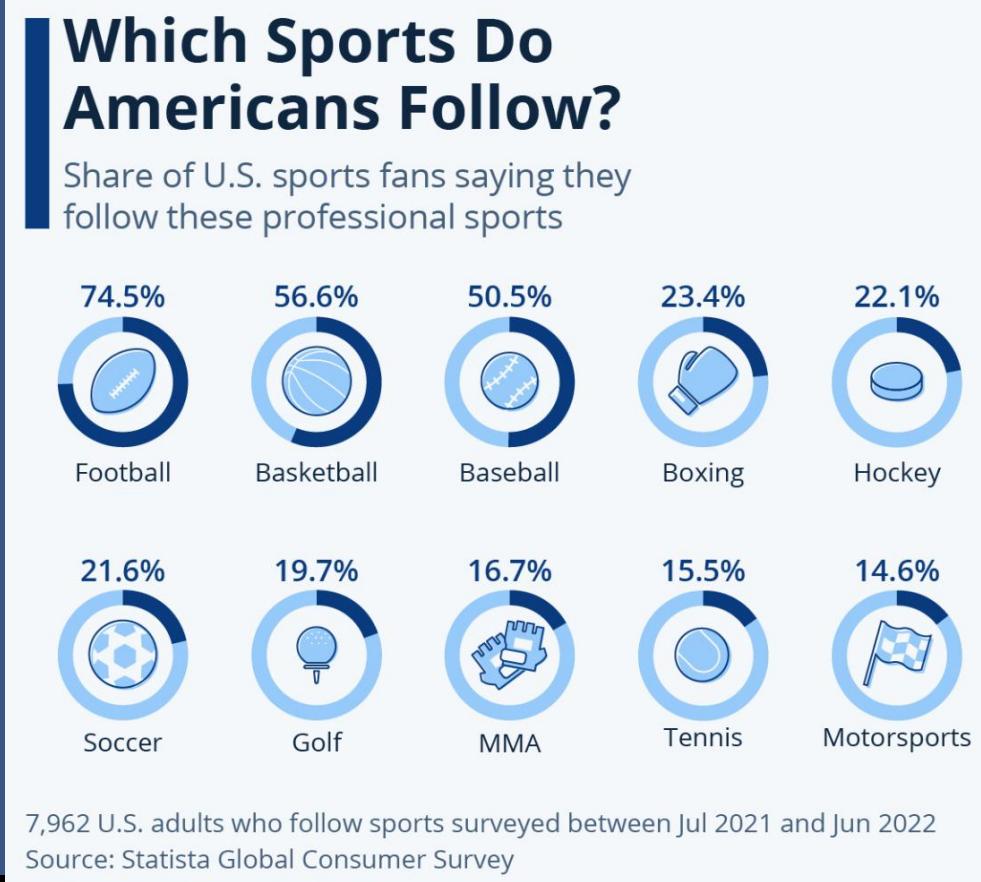
# Current Landscape of Sports

- **Most Popular US Sports (Gallup.com)**

  - **41% of US Adults Say Football is "Favorite"**
  - **Football has been "Favorite" Since 1972**
  - **Not True with Young Adults (Basketball)**
  - **Soccer is Interesting**
    - **<2% Prior to 2004**
    - **Consistently Above 2% Since 2008 (High of 7%)**
  - **Updated to 2024**



What is your favorite sport to watch?

— % Football  — % Baseball  -- % Basketball

Trend for the top three sports
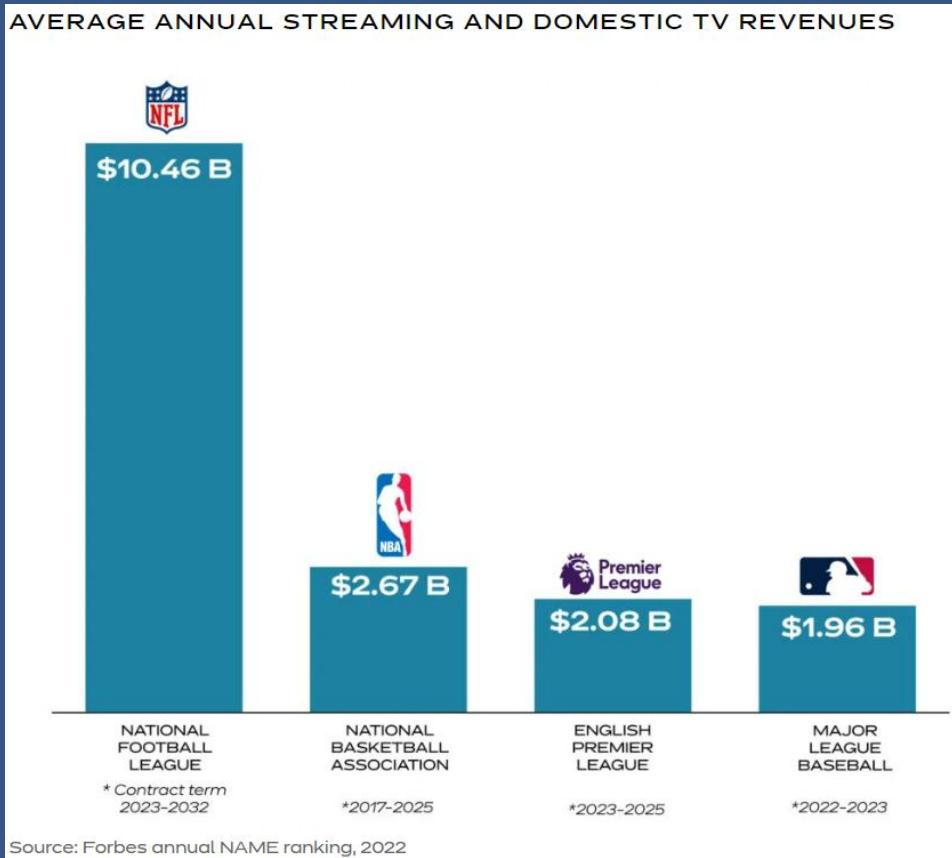
# Current Landscape of Sports

- **Infographic About US Sports (Statista.com)**

## Which Sports Do Americans Follow?

Share of U.S. sports fans saying they follow these professional sports

| 74.5% | 56.6% | 50.5% | 23.4% | 22.1% |
|-------|-------|-------|-------|-------|
| Football | Basketball | Baseball | Boxing | Hockey |

| 21.6% | 19.7% | 16.7% | 15.5% | 14.6% |
|-------|-------|-------|-------|-------|
| Soccer | Golf | MMA | Tennis | Motorsports |

7,962 U.S. adults who follow sports surveyed between Jul 2021 and Jun 2022
Source: Statista Global Consumer Survey

# Current Landscape of Sports

- **Revenue in Sports Leagues (Forbes 2022)**



AVERAGE ANNUAL STREAMING AND DOMESTIC TV REVENUES

| League | Revenue | Contract term |
|---|---|---|
| NFL – NATIONAL FOOTBALL LEAGUE | $10.46 B | *Contract term 2023-2032 |
| NBA – NATIONAL BASKETBALL ASSOCIATION | $2.67 B | *2017-2025 |
| Premier League – ENGLISH PREMIER LEAGUE | $2.08 B | *2023-2025 |
| MLB – MAJOR LEAGUE BASEBALL | $1.96 B | *2022-2023 |

Source: Forbes annual NAME ranking, 2022

# Current Landscape of Sports

- **Revenue in Sports Leagues (Forbes 2022)**



AVERAGE TEAM VALUE BY LEAGUE

| | |
|---|---|
| NFL (32 teams) | $3.48 B |
| EPL (20 teams) | $2.53 B |
| NBA (30 teams) | $2.48 B |
| MLB (30 teams) | $2.07 B |

Source: Forbes annual NAME ranking, 2022

# Current Landscape of Sports

- **Revenue in Sports Leagues (Wikipedia)**

  - **List Based off Most Recent Data (in Euro)**
    - **NFL (American Football,19.1 Billion)**
    - **MLB (Baseball, 11.0 Billion) – Swapped with NBA**
    - **NBA (Basketball, 10.6 Billion)**
    - **EPL (Soccer, 7.7 Billion, England)**
    - **NHL (Hockey, 6.0 Billion)**
    - **La Liga (Soccer, 5.2 Billion, Spain)**
    - **Bundesliga (Soccer, 4.4 Billion, Germany)**
    - **Serie A (Soccer, 3.6 Billion, Italy)**
    - **Ligue 1 (Soccer, 2.4 Billion, France)**
    - **MLS (Soccer, 2.2 Billion, US) – Up From 1.5 Billion**

  - **Compare Revenue Per Team and Revenue Per Match**

# Current Landscape of Sports

- **Growth in Team Sports (sisugaurd.com)**



Team Sports Gaining Participants: 2011-2016

| Sport | Growth |
|---|---|
| Rugby | 82.4% |
| Roller Hockey | 56.0% |
| Swimming on a Team | 42.6% |
| Lacrosse | 39.3% |
| Cheerleading | 32.2% |
| Field Hockey | 31.8% |
| Ice Hockey | 26.6% |
| Volleyball (Sand/Beach) | 23.3% |
| Gymnastics | 11.5% |
| Soccer (Indoor) | 10.5% |
| Baseball | 8.8% |
| Paintball | 2.8% |
| Softball (Fast-Pitch) | 2.8% |
| Volleyball (Grass) | 2.0% |



Based on 2017 Annual Report
On US Trends in Team Sports
By Sports & Fitness Industry
Association (SFIA)

# Current Landscape of Sports

- **Growth in Team Sports (SFIA Twitter)**

  - **Based off 2019 Report**

| Sport/Fitness Activity | | 3-Year Average Annual Growth |
|---|---|---|
| 1 | Cardio Tennis | 11.3 % |
| 2 | Pickleball | 9.7% |
| 3 | Hiking (Day) | 8.8% |
| 4 | Bicycling (BMX) | 8.7% |
| 5 | Skiing (Cross-Country) | 7.3% |
| 6 | Trail Running | 7.2% |
| 7 | Kettlebells | 6.4% |
| 8 | Rowing Machine | 6.2% |
| 9 | Rugby | 5.2% |
| 10 | Kayaking (Recreational) | 5.1% |

# Current Landscape of Sports

- **Growth in Team Sports (SFIA)**
  - **Interesting Information About 2022 Annual Report**

  - **Pandemic Effect on Team Sports**
    - 67 million in 2020 to 68.3 million in 2021
    - 70.8 million in 2019

  - **Team Sports Ages 6-12 Increased 0.6 million in 2021**

  - **Basketball Continues to be Most Played (27.1 million)**

  - **Soccer Overtook Basketball for 6-year-olds in 2021**

# Current Landscape of Sports

- **Growth in Team Sports (SFIA)**

  - **Participant Rate Changes**
    - **Fast-Pitch Softball (+15.3%)**
    - **Gymnastics (+10.9%)**
    - **Court Volleyball (+8.1%)**
    - **Swimming on Team (+8%)**

  - **Team Sports Increased by 8 Million from 2022 to 2023**
  - **Sport Per Participant Continues a Downward Trend**
    - **Mean = 1.73 (Lowest in the Decade)**
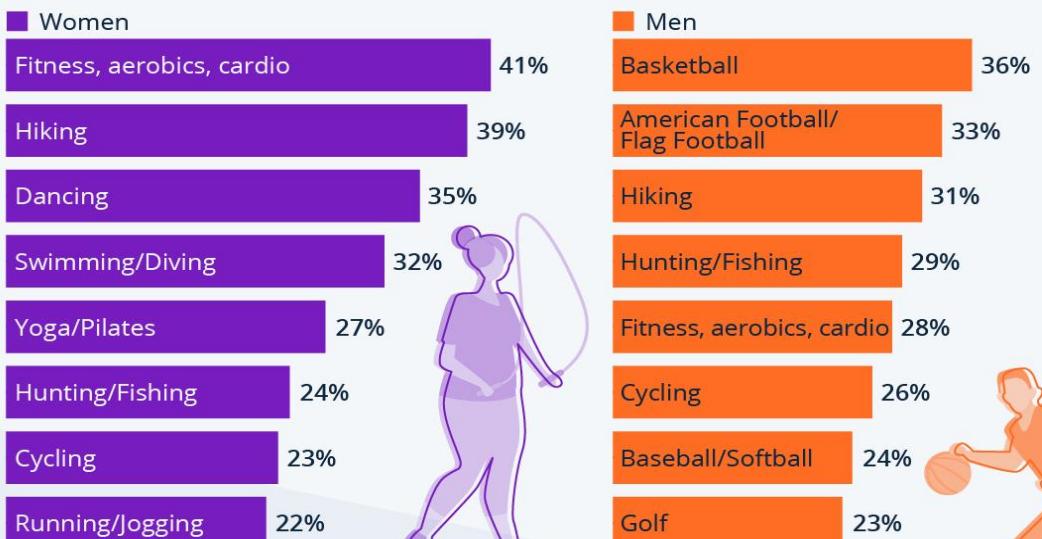
# Current Landscape of Sports

- **Article by Florian Zandt (Statista.com)**
  - **96% of Americans Spent Time on Sports and Leisure Activities in 2021 (US BLS)**

  - **Number Consistent Along the Gender Divide**

  - **Article Focuses on Differences Between Men and Women Respondents**

## Men Sweat on Fields, Women in the Gym

Share of respondents who do the following sports at least occasionally

**Women**

| Sport | % |
|---|---|
| Fitness, aerobics, cardio | 41% |
| Hiking | 39% |
| Dancing | 35% |
| Swimming/Diving | 32% |
| Yoga/Pilates | 27% |
| Hunting/Fishing | 24% |
| Cycling | 23% |
| Running/Jogging | 22% |

**Men**

| Sport | % |
|---|---|
| Basketball | 36% |
| American Football/Flag Football | 33% |
| Hiking | 31% |
| Hunting/Fishing | 29% |
| Fitness, aerobics, cardio | 28% |
| Cycling | 26% |
| Baseball/Softball | 24% |
| Golf | 23% |

21,803 U.S. adults who do sports or exercise at least occasionally (18-64 y/o) surveyed online Apr. 2022-Mar. 2023
Source: Statista Consumer Insights

statista

# Dope Quote

The most meaningful way to differentiate your company from your competitors, the best way to put distance between you and the crowd is to do an outstanding job with information.
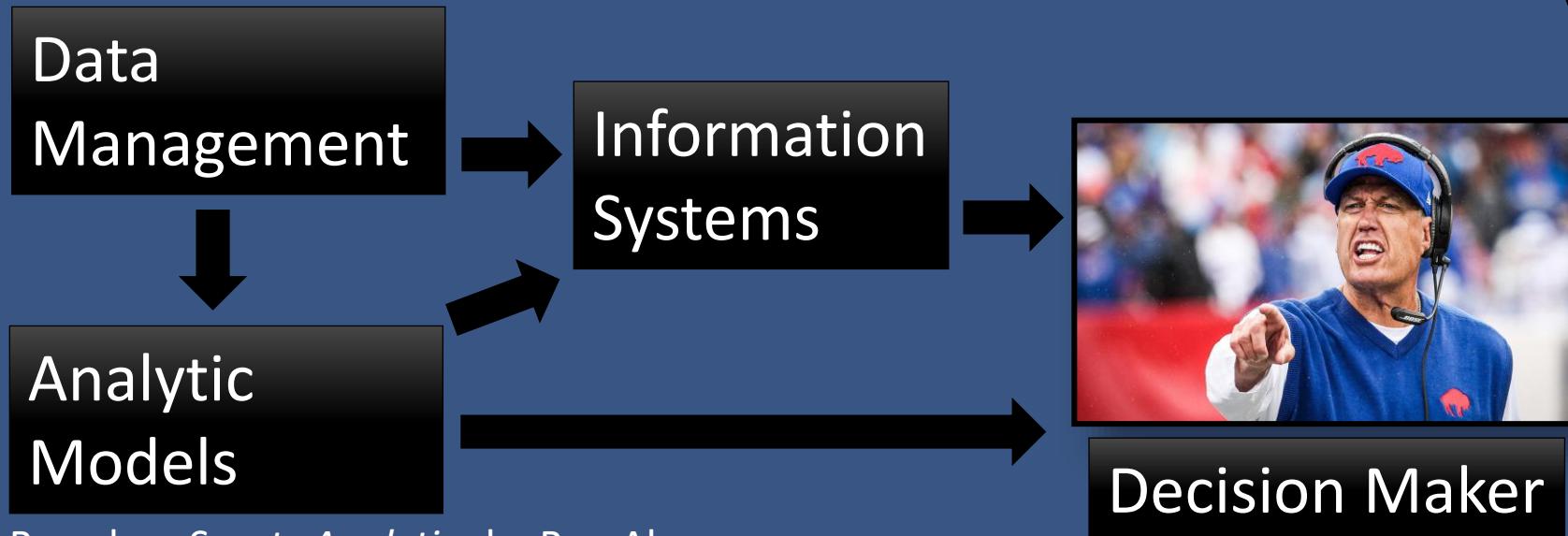
How you gather, manage, and use information will determine whether you win or lose.

- Bill Gates

# What is Sports Analytics?

- **Defined by Ben Alamar**
  - **Data Management**
  - **Analytic Models**
  - **Information Systems**

Data Management

Information Systems

Analytic Models

Decision Maker

Based on *Sports Analytics* by Ben Alamar

# What is Sports Analytics?

- **Purpose: To Aid an Organization's** <u>Decision Makers</u> **in Gaining a Competitive Advantage**

- **Goals**
  - **Save the Decision Maker Time by Making Information Acquisition Efficient (Data Management/Information Systems)**

  - **Provide Decision Makers with Novel Insight (Analytic Models)**

- **We are an Accessory to the Decision Maker**

# What is Sports Analytics?

- **Different Decision Makers**
  - **Off-the-Field: Profit Driven**
  - **On-the-Field: Performance Driven**

- **Attributes of the Data Analyst**
  - **Competence – Ben Alamar**
  - **Leadership – Ben Alamar**
  - **Humility – Dr. Mario**
  - **Honesty – Dr. Mario**

# Final Inspiration

If you're not first, you're **Cleveland.**
#216

- **Mahatma Mario**