ETC 5513 Assignment 4

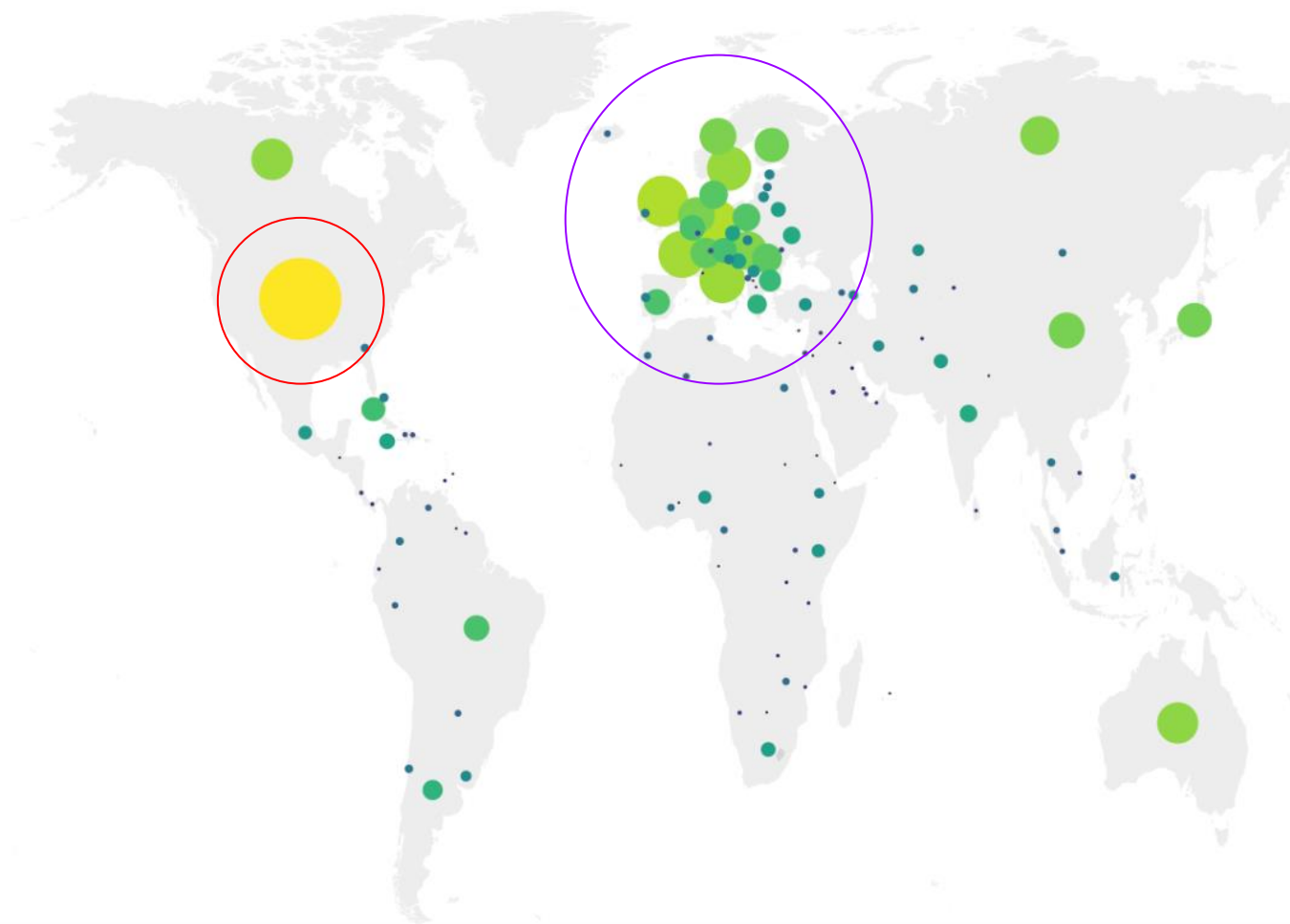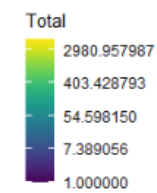Group Name: DDD

Group Member: Juntong Wei (Michelle)
                        Qin Xu (Rachel)
                        Xuanming Liang (Ricky)
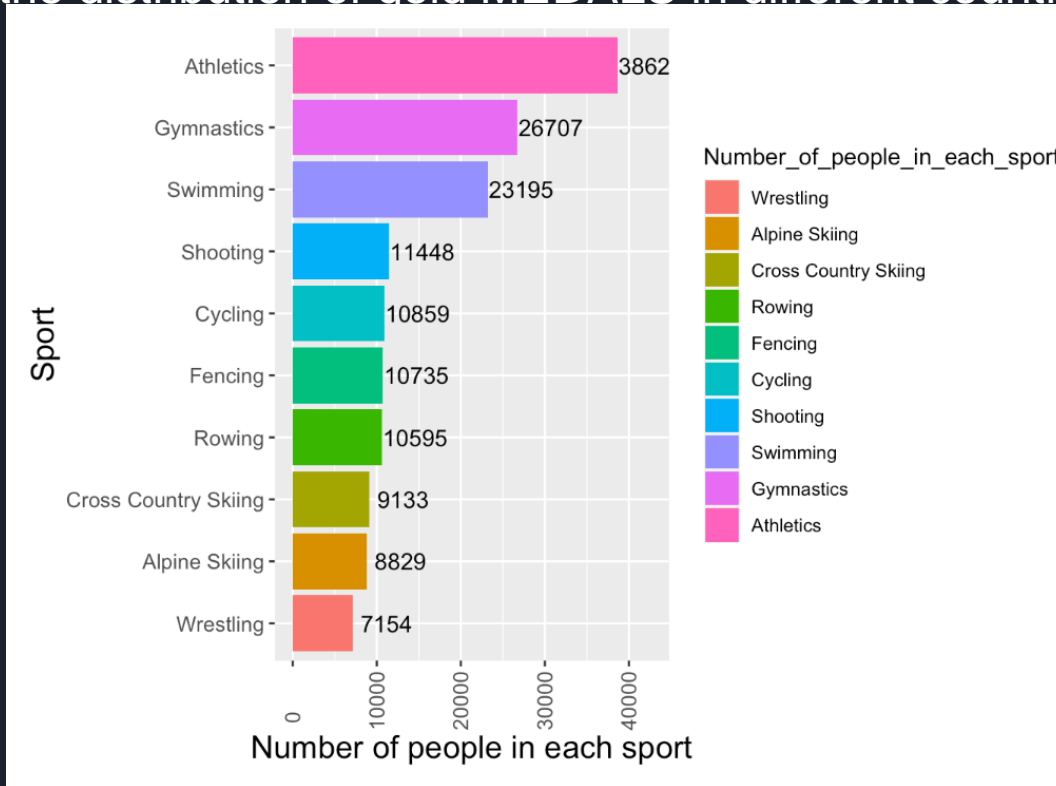   Ziang Li (Tide)

Introduction

- Numbers of medal

- Age

- Countries

- Tourists

Number of total medals by countries

Total

○ 1000

○ 2000

○ 3000

○ 4000

○ 5000

Total

2980.957987

403.428793

54.598150

7.389056

1.000000

Part 2: Find out which sport has the largest number of participants and study the distribution of gold MEDALS in different countries over time

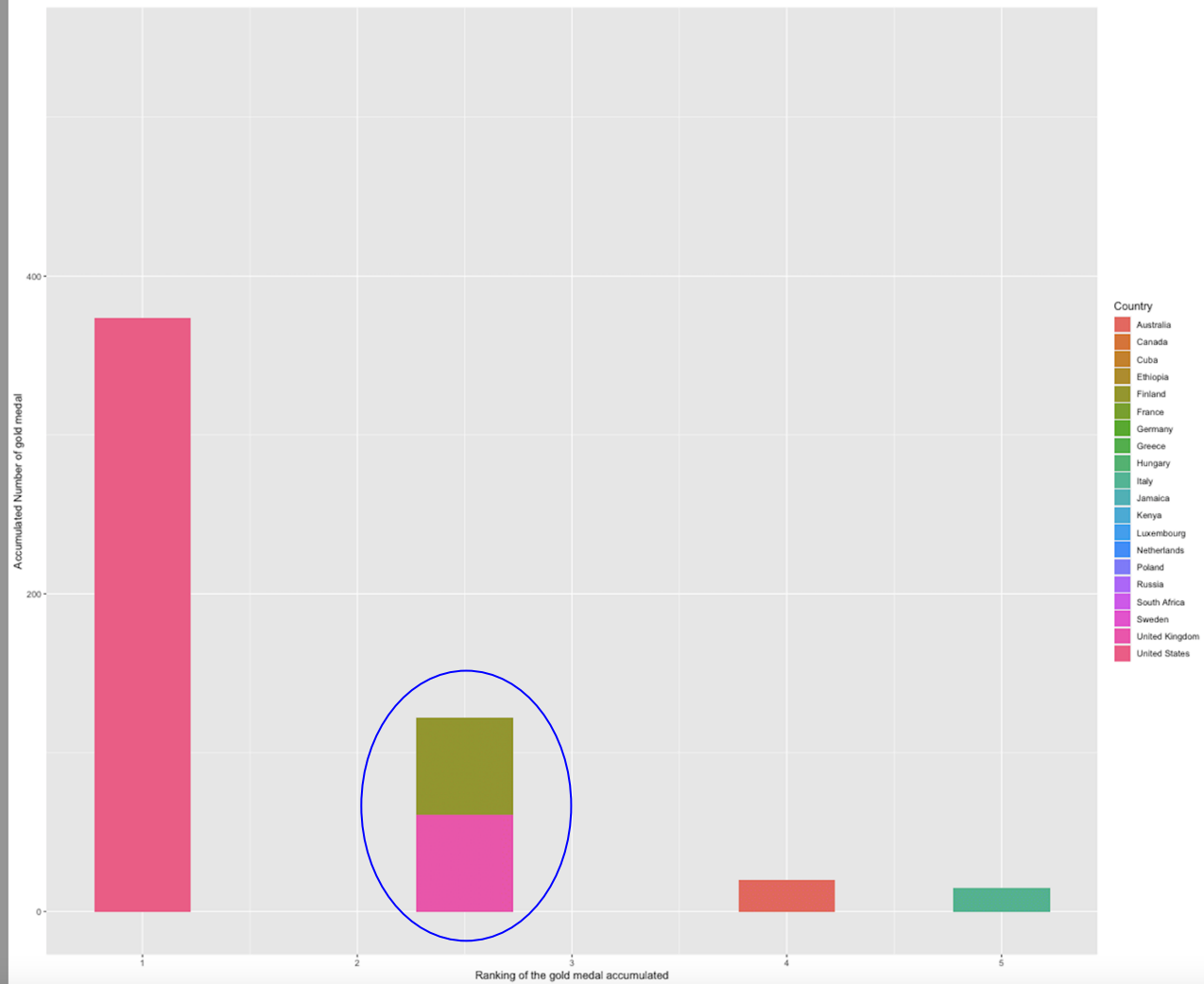# Athletics: Ranking of the gold medal accumulated in each year (1896-2016)
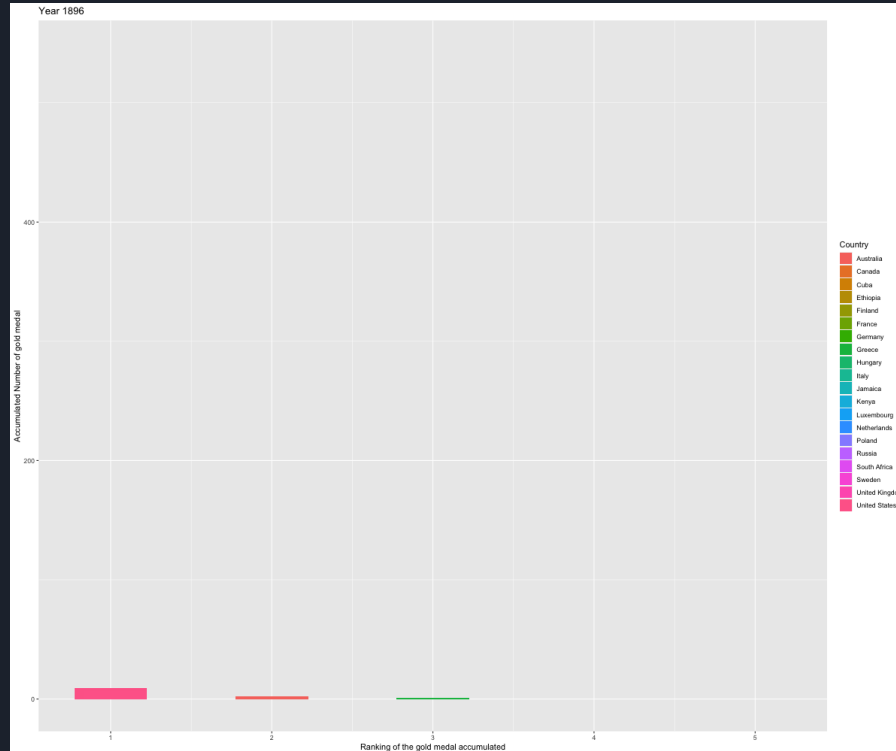
How about the Medals of top 5 countries allocated in the events

This Line chart shows the Medals changing of the Top5 countries in previous Olympic Games.

The United States has consistently ranked first in the total number of medals.

After 1990, the number of medals in Germany has increased rapidly.

Changes in the total number of medals of the top 5 countries in the previous Olympic Games

Number of the medals

Country
- France
- Germany
- Italy
- United Kingdom
- United States

4000

2000

0

1890   1920   1950   1980   2010   Year

Distribution of the top 5 Countries' medals among the 5 sports with the most participants

The number of medals in the United States is larger than the other four countries.

The United States has an absolute advantage in swimming events.

The medals of United Kingdom are more distributed in Cycling.

Medals from other countries are very evenly distributed among the five events

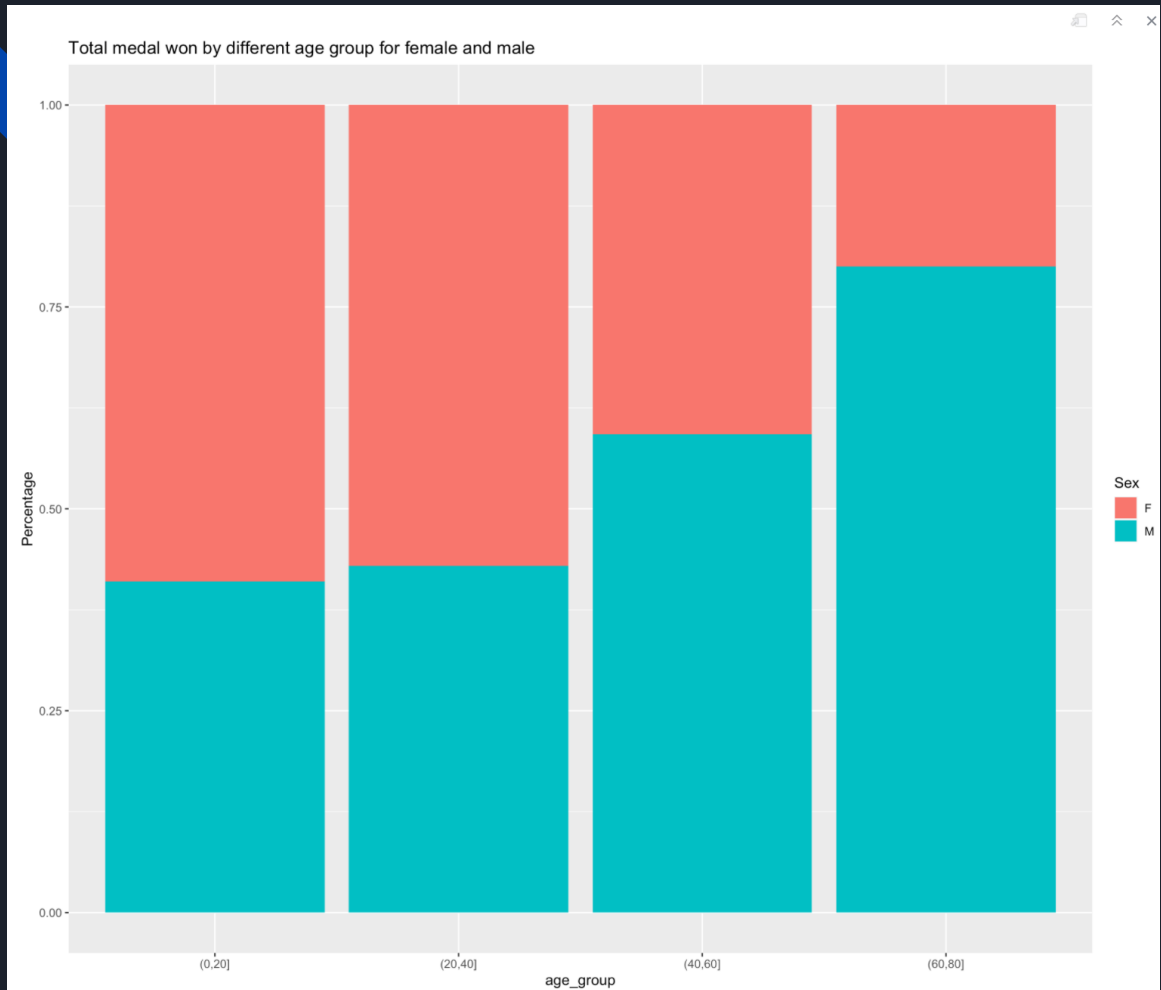# Comparing medals won for different age group by gender

Sex	total_medal_by_sex	age_group	total_medal_in_age_group	Percentage
F	121	(0,20]	27	22.314050
F	121	(20,40]	60	49.586777
F	121	(40,60]	31	25.619835
F	121	(60,80]	3	2.479339
M	161	(0,20]	25	15.527950
M	161	(20,40]	60	37.267081
M	161	(40,60]	60	37.267081
M	161	(60,80]	16	9.937888

Total medal won by different age group for female and male.

Gold medal distribution between age by gender

Sex	age_group	Medal	number	total_gold_medal	Percentage
F	(0,20]	Gold	8	37	21.621622
F	(20,40]	Gold	20	37	54.054054
F	(40,60]	Gold	8	37	21.621622
F	(60,80]	Gold	1	37	2.702703
M	(0,20]	Gold	8	50	16.000000
M	(20,40]	Gold	20	50	40.000000
M	(40,60]	Gold	20	50	40.000000
M	(60,80]	Gold	2	50	4.000000

The distribution of gold medal won by different age group for female and male
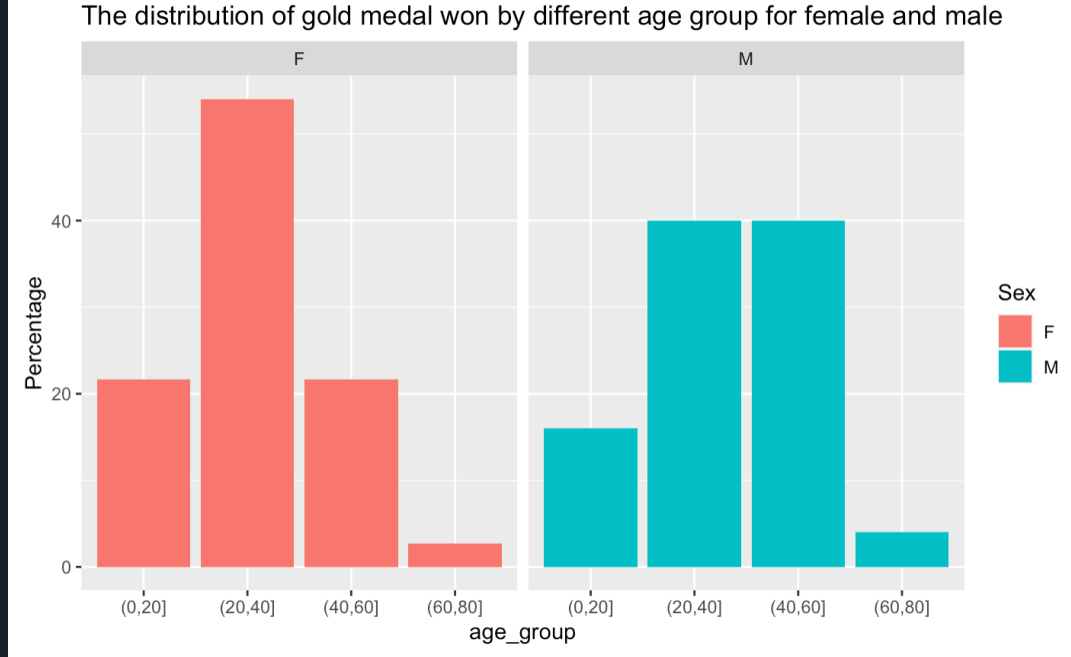
Silver medal distribution between age by gender

Sex	age_group	Medal	number	total_silver_medal	Percentage
F	(0,20]	Silver	10	42	23.80952
F	(20,40]	Silver	20	42	47.61905
F	(40,60]	Silver	12	42	28.57143
M	(0,20]	Silver	8	56	14.28571
M	(20,40]	Silver	20	56	35.71429
M	(40,60]	Silver	20	56	35.71429
M	(60,80]	Silver	8	56	14.28571

The distribution of silver medal won by different age group for female and male

Silver medal distribution between age by gender

Sex	age_group	Medal	number	total_bronze_medal	Percentage
F	(0,20]	Bronze	9	42	21.428571
F	(20,40]	Bronze	20	42	47.619048
F	(40,60]	Bronze	11	42	26.190476
F	(60,80]	Bronze	2	42	4.761905
M	(0,20]	Bronze	9	55	16.363636
M	(20,40]	Bronze	20	55	36.363636
M	(40,60]	Bronze	20	55	36.363636
M	(60,80]	Bronze	6	55	10.909091

The distribution of bronze medal won by different age group for female and male
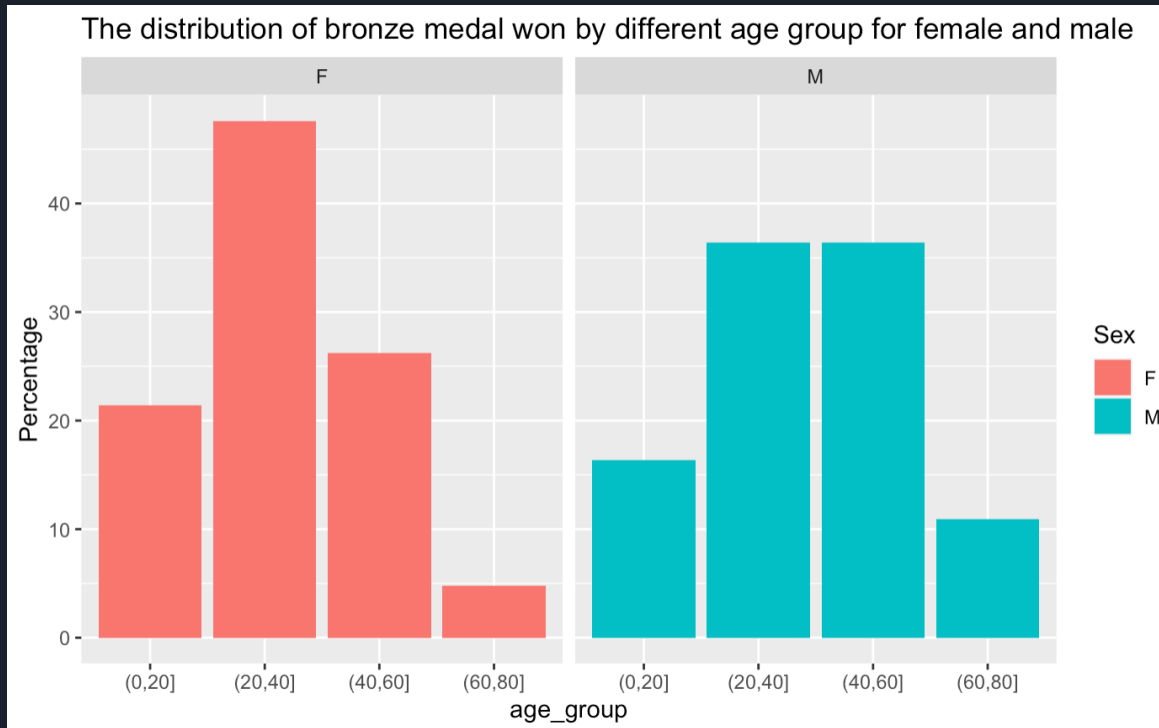
The distribution of medal won by different age group for female and male

CONCLUSION