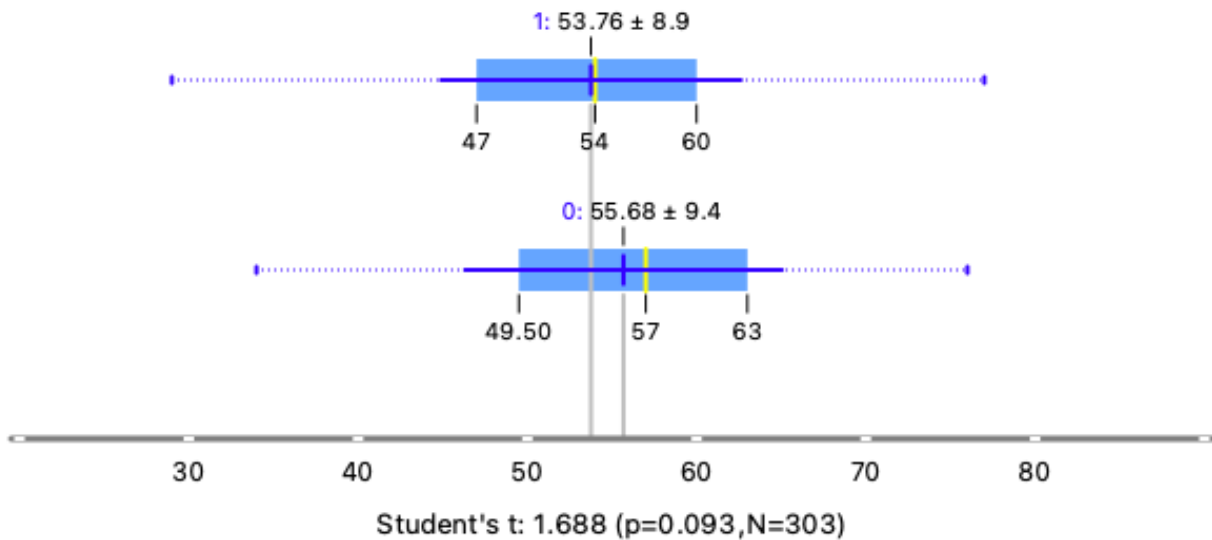
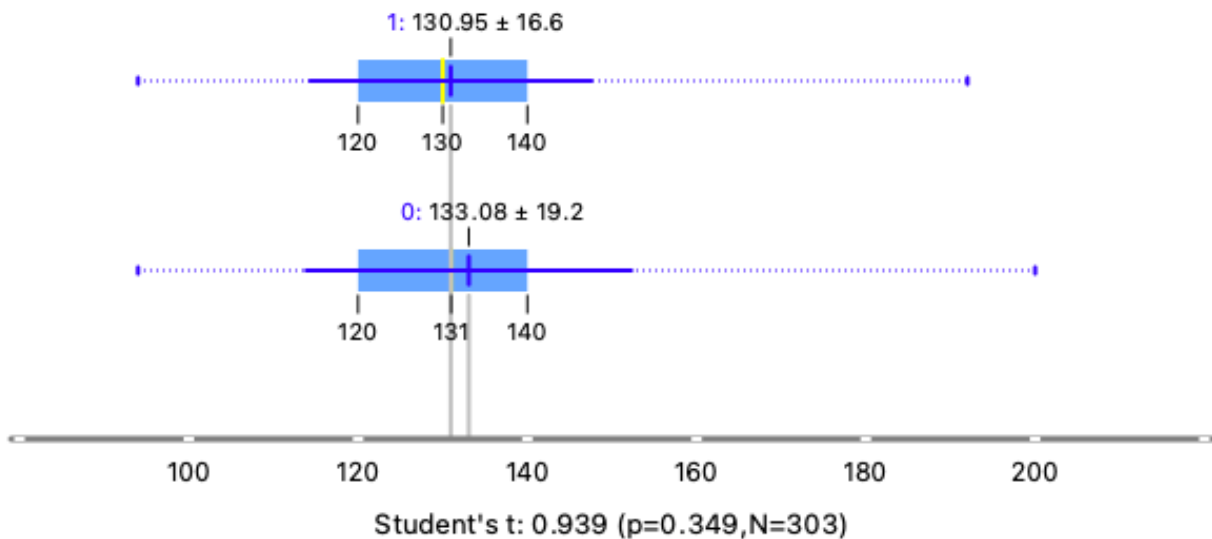


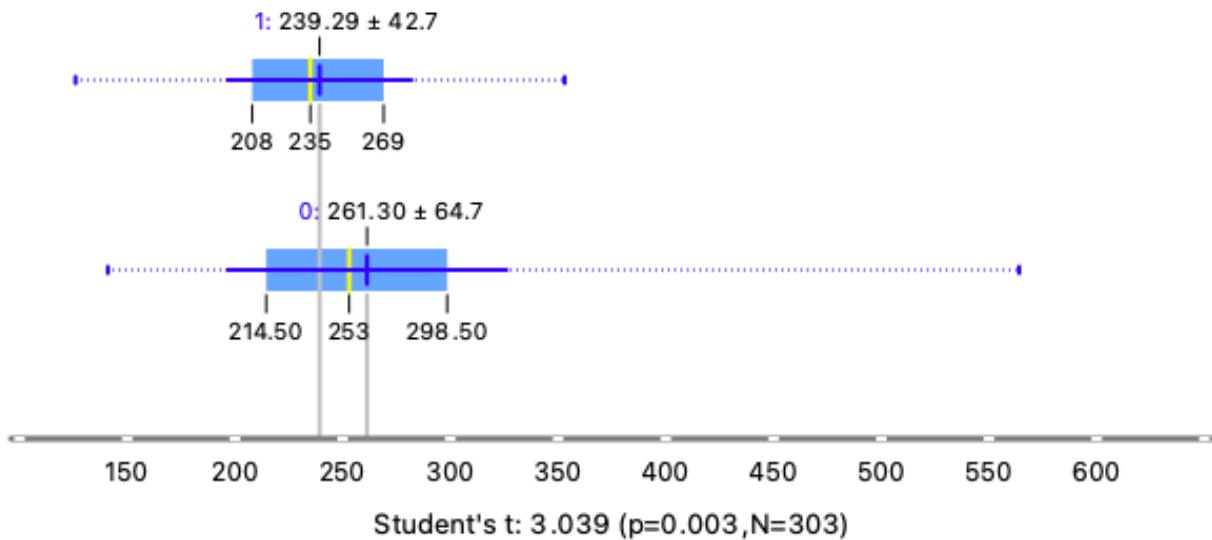
First, by plotting the distribution of age, participant is at 25+ years old and maximum at 80 years old. Where most people participated in this study are around 50 – 60. This does not come to any surprise. Since many people more concern about their health when they get older.



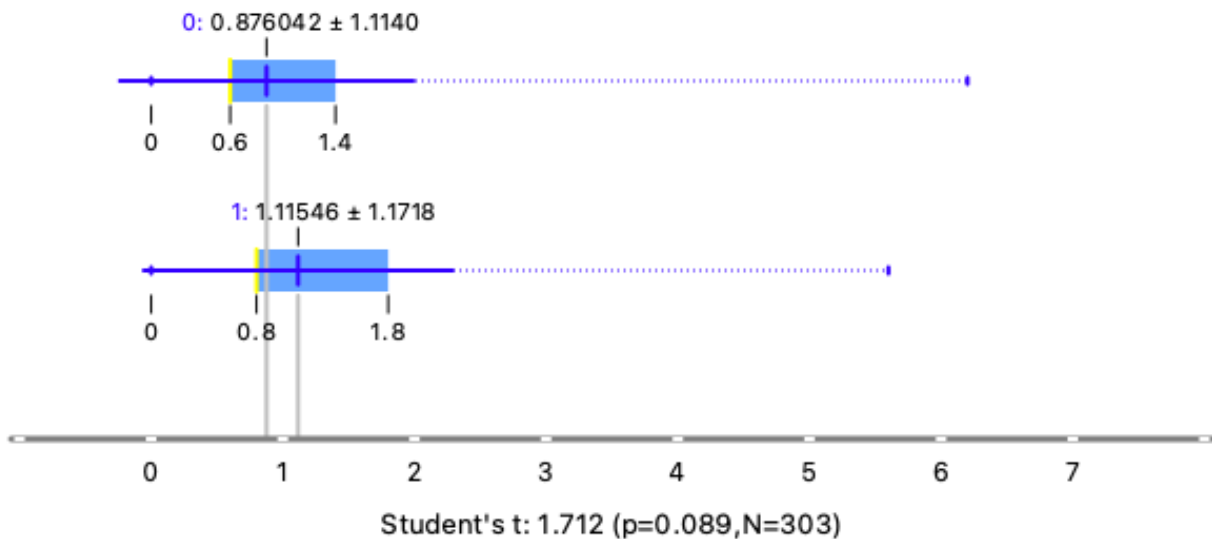
Looking at the box plot of age grouped by sex (0 = female, 1 = male). We found that male population are little bit younger than female. It may not be surprised as well. Since most people at older age are female in world population. So, it makes sense that representative sample in study should represent world population as well.



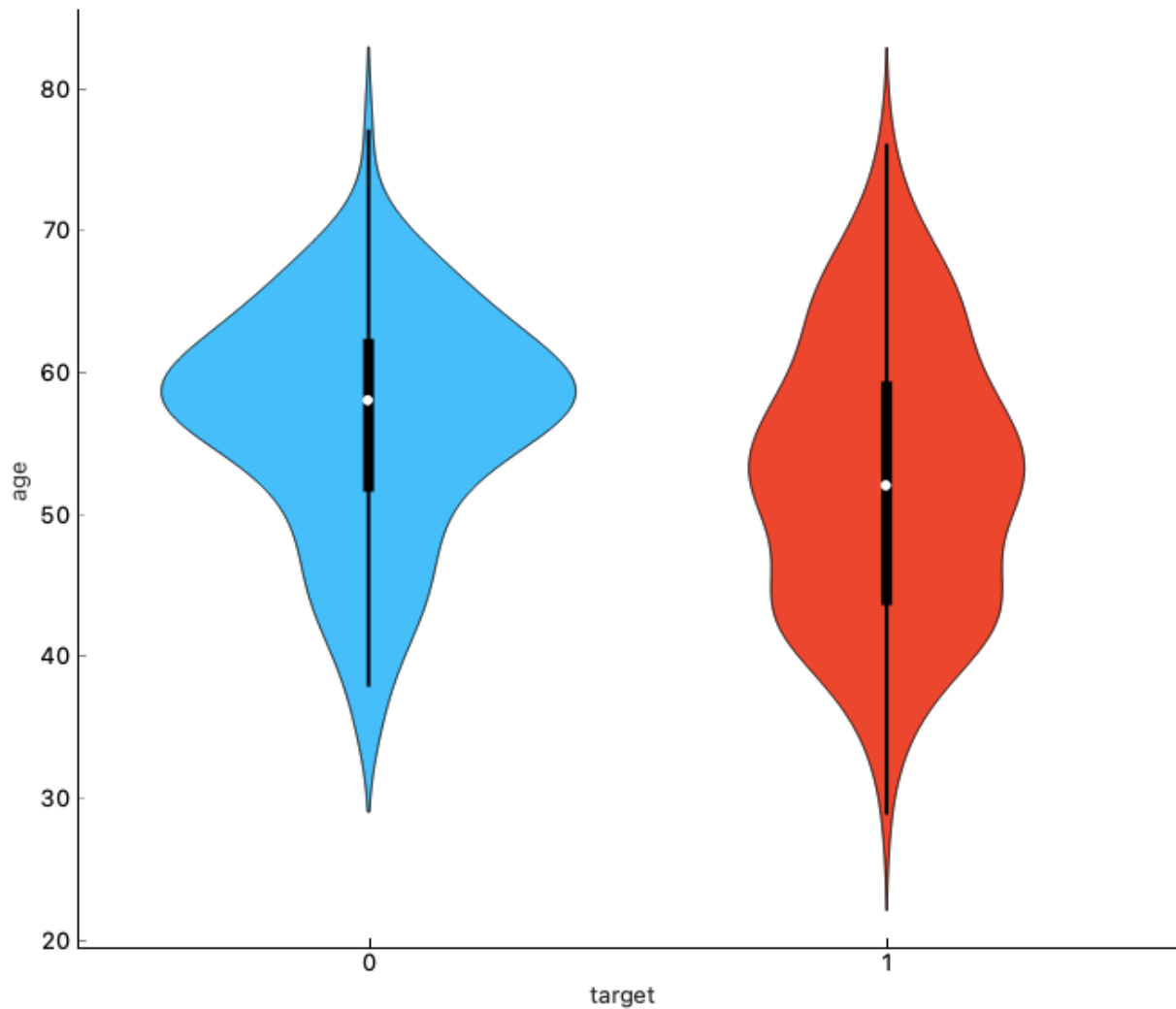
This is a box plot of resting blood pressure grouped by sex. The acceptable rate of resting blood pressure is 120 mmHg. But the mean in the plot is a little bit higher than normal standard. However, it still in normal range. But some people have very high blood pressure that could be potentially danger as well (Most of them are female).



This box plot shows the serum cholesterol grouped by sex. This is a measurement focused on the cholesterol in blood. The high number of cholesterol can indicate a potential risk in many diseases. Acceptable range is around 125-200 mg/dL. As it can be seen from the plot, most people have much higher level of serum cholesterol than anticipated.



This is a box plot of ST depression induced by exercise relative to rest grouped by sex. The ST depression induced by exercise relative to rest is a measure that use to indicate a potential coronary artery disease. If the value is higher than 1 that could indicate a potentially heart disease. Surprisingly, this value is seemed to be higher in female. Consider that age range of female is higher than male. And the older, the more likely this value to be higher, it may not be so surprise.



This is a violin plot between target and age. Target indicate the heart disease where 0 is no disease. Heart disease seems to appear more on the people with older age (35+ years old). But have to say that most people don't have heart disease. So, age might not be appropriate to use for further modeling for heart disease prediction.