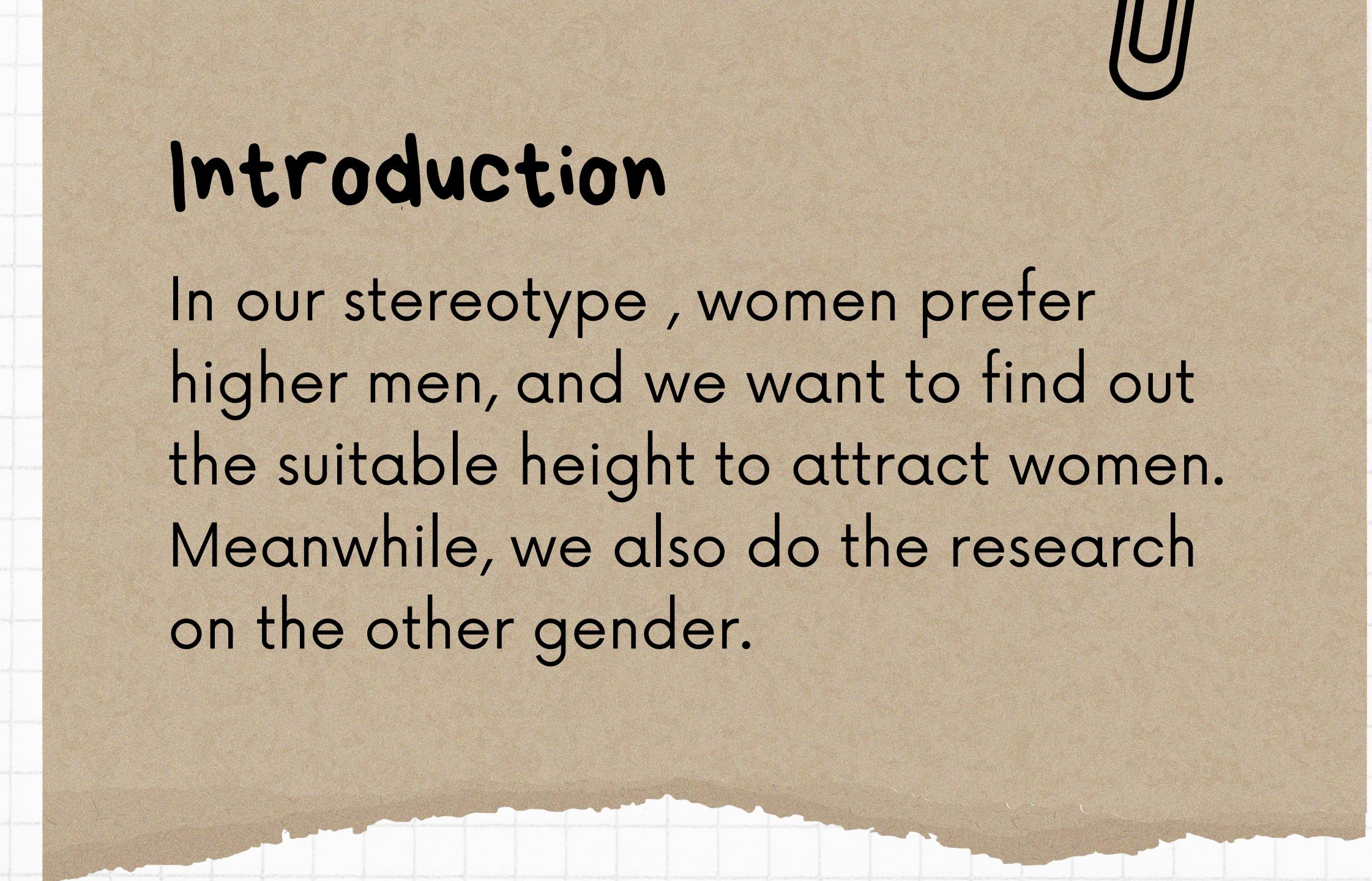


Linear Algebra Final Project -- Suitable Height to LIVE

110550163 張育安

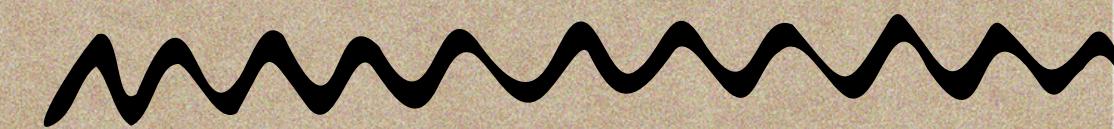
110550124 林家甫

110550049 李士平





Methods



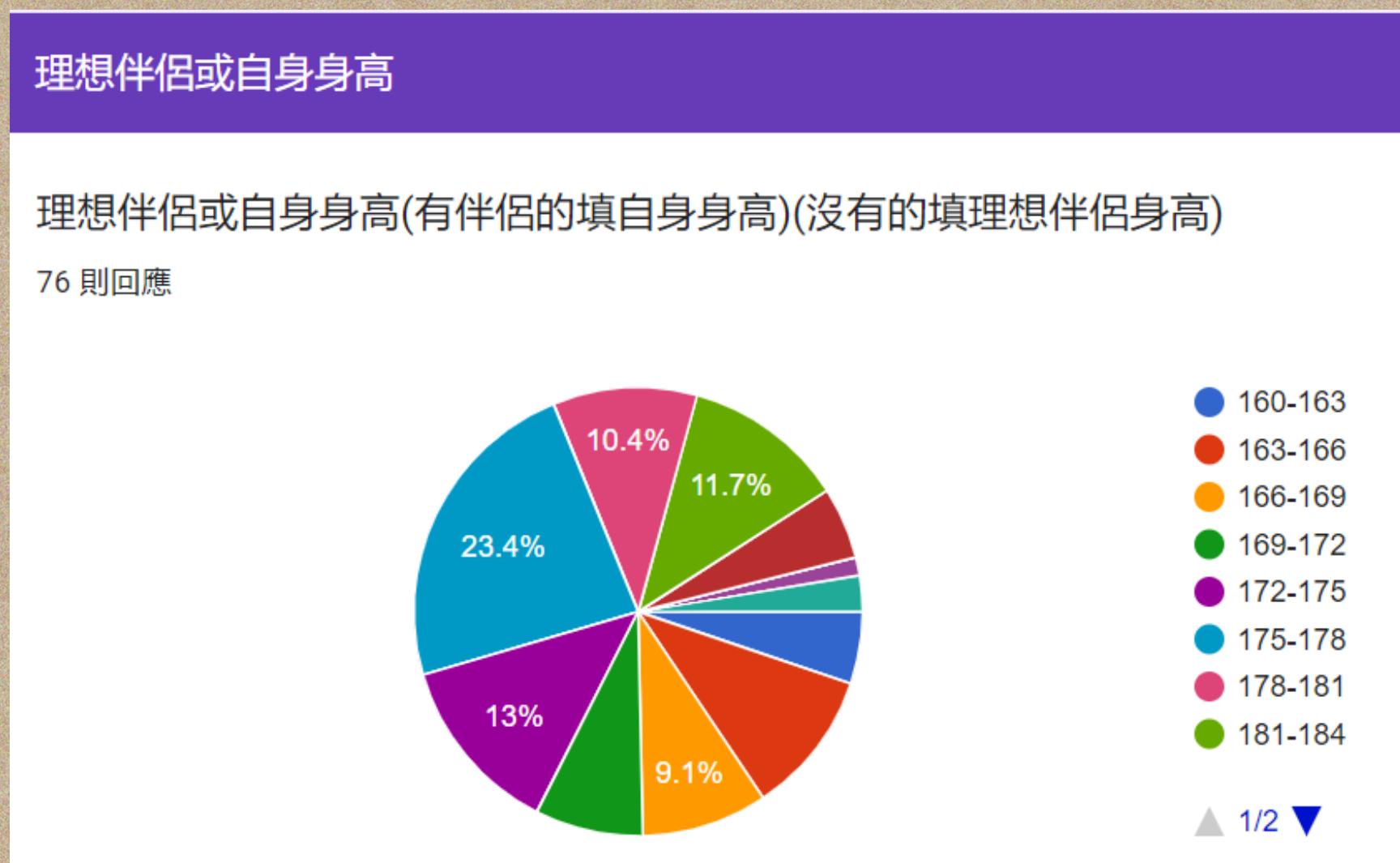
We use a google form to collect the data, and use the least square approximation to find out the relevance between the (ideal) partners' height(Y) and the height of the subjects(X).

First, we assume X-Y are fitting in the parabola. Then we find the parabolas's maximum point, which will be the most suitable height to have a boy/girlfriend.

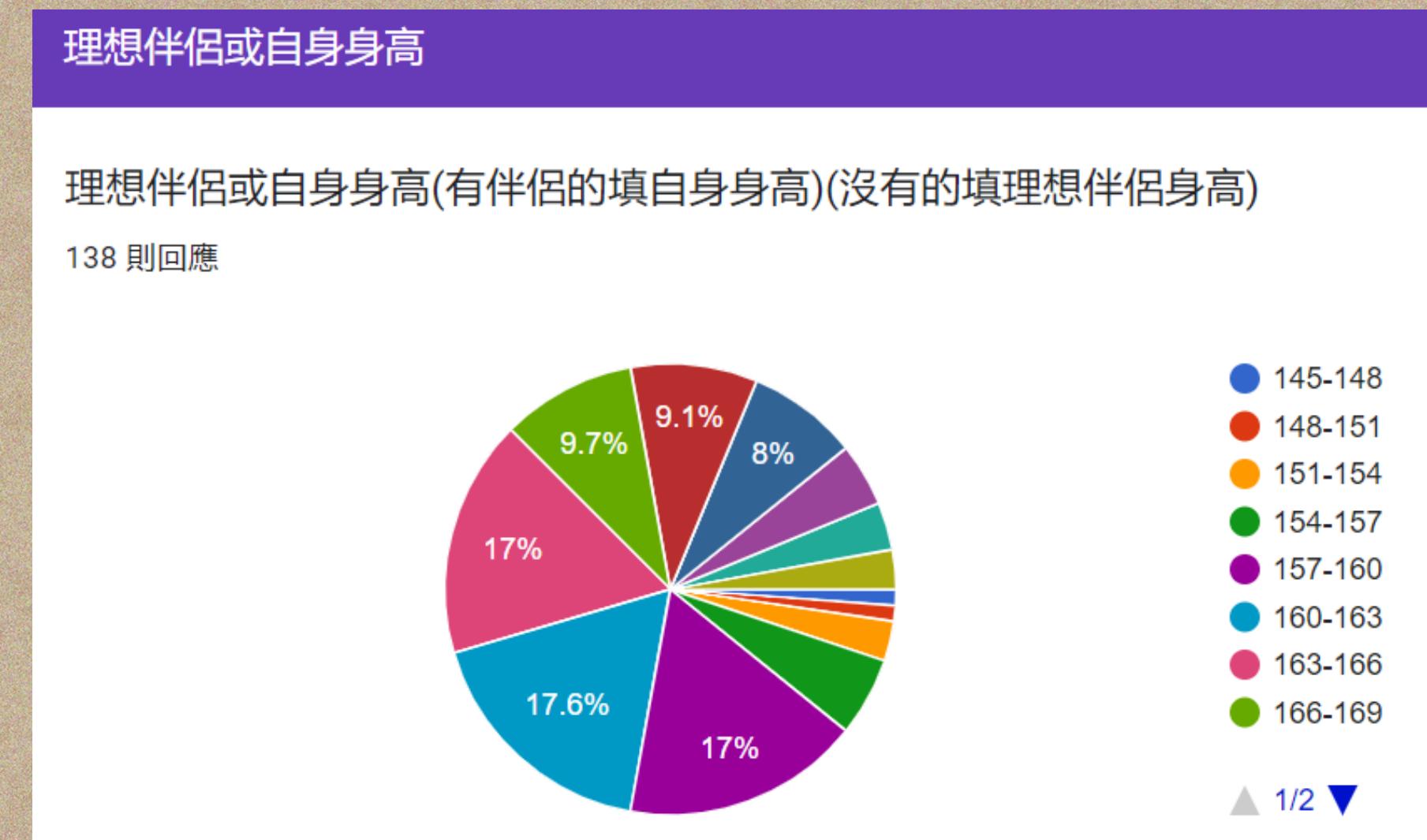
If the inaccuracy are higher than we expected, we will further discuss the reason behind it.

Dataset

Male

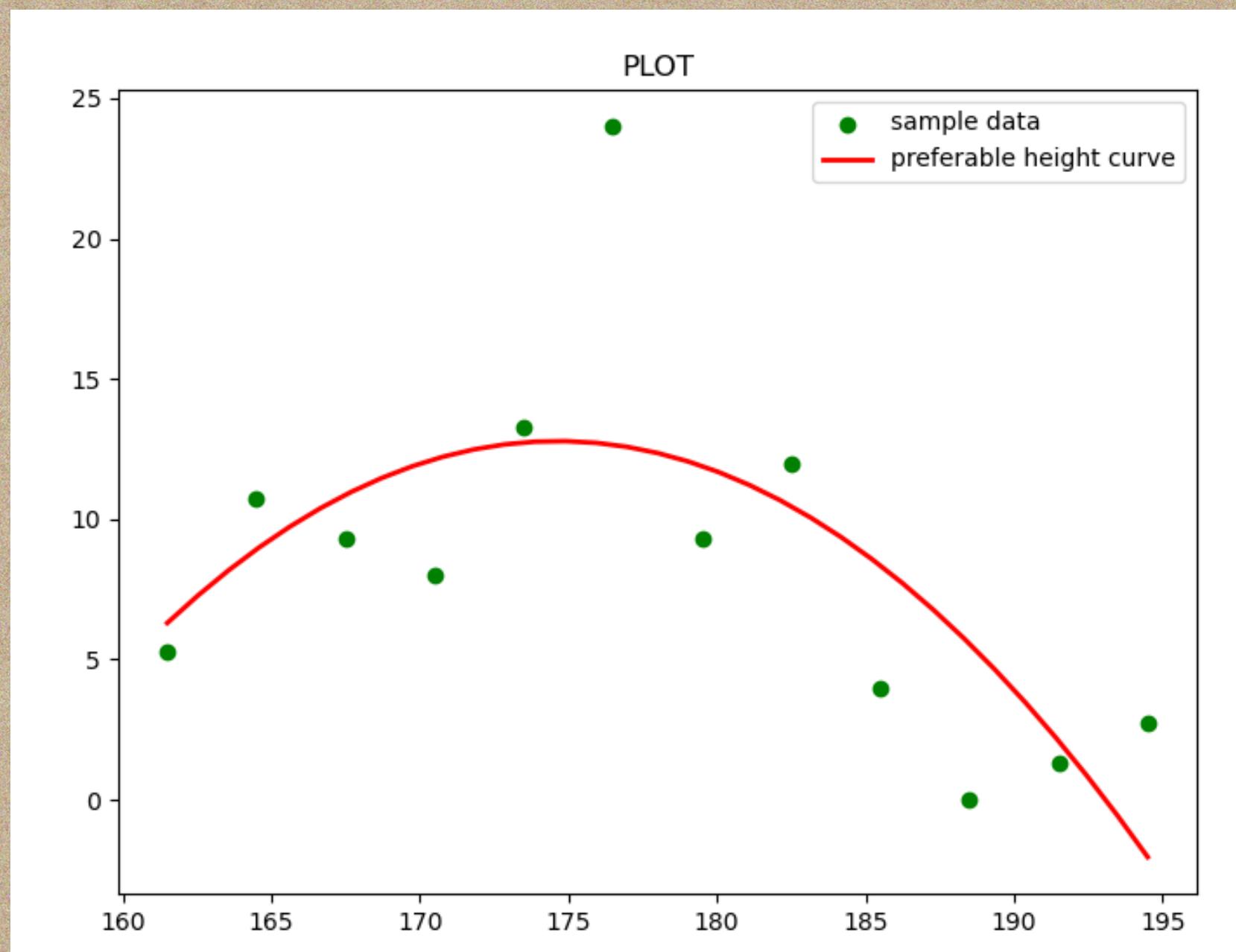


Female

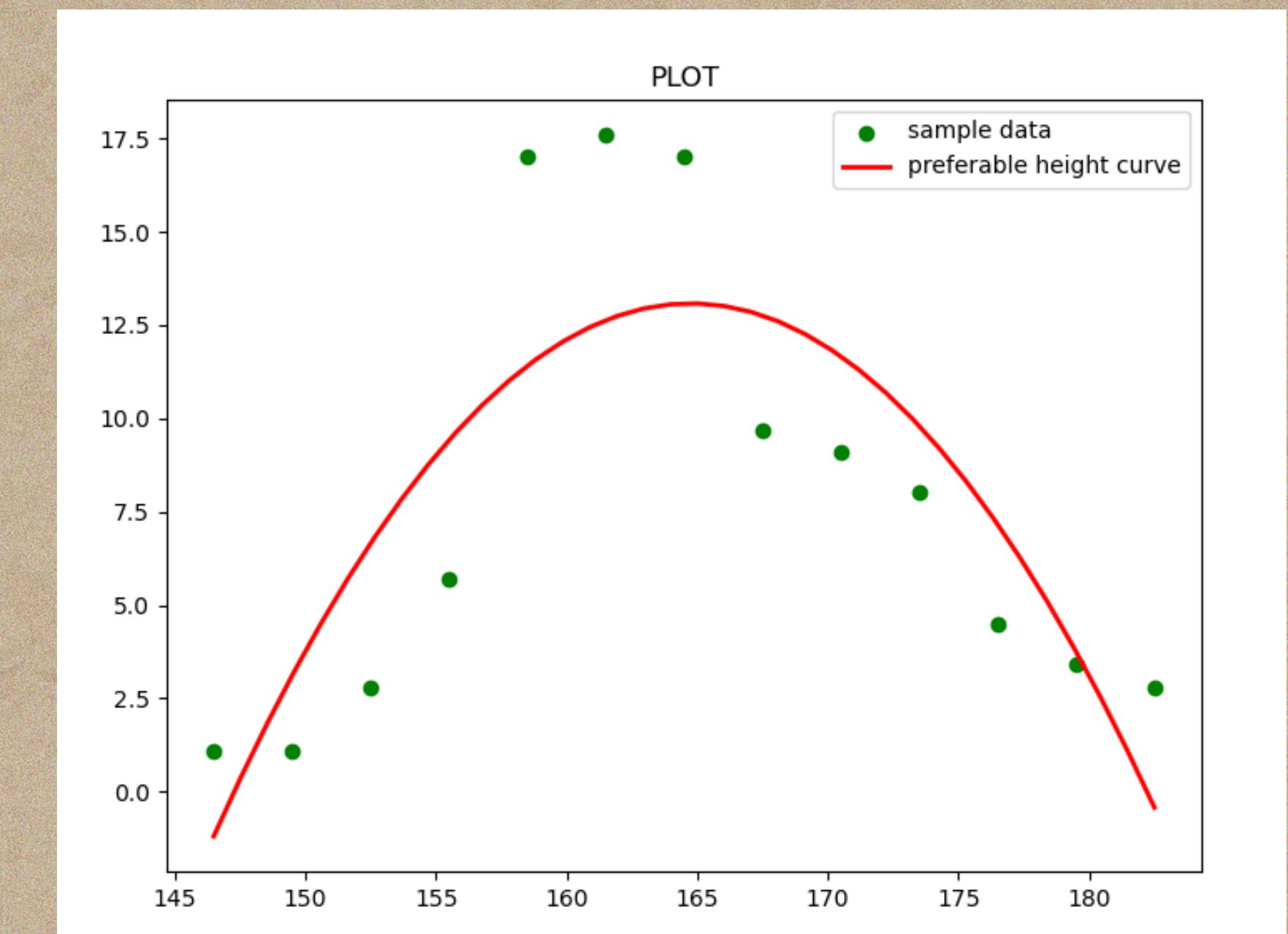


Result

Male



Female

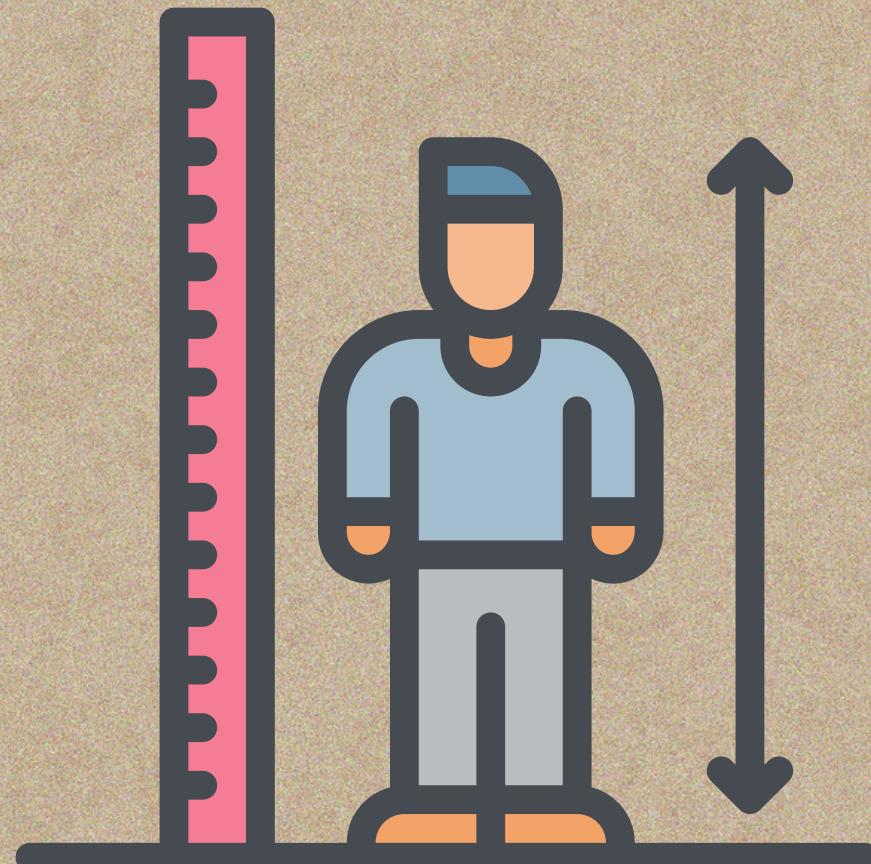


Result

We found that the ideal girlfriends in the men's eyes are highly related to their height. ($R^2=0.67$)

On the other hand, the height of boyfriends does not affect that much for women , but still has something to do with their height.

($R^2=0.5$)



Suitable Height

Male: 174.202(cm)

Female: 164.35(cm)





Conclusion

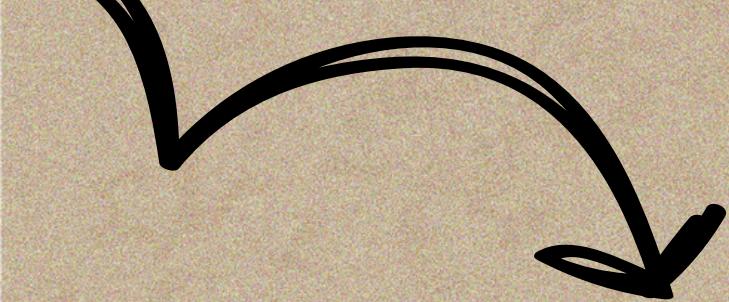
Although we are not able to grow to the most suitable height,
we can change our clothing to make us look more attractive.



Discussions



1. The number of subjects is only 206, the dataset is not big enough.
2. The range of height may be too large. (3 cm)
3. According to some reviews on Dcard, they hope the ideal height of a girlfriend/boyfriend is a multiple choice question with more than one selection.





**Thank
you**