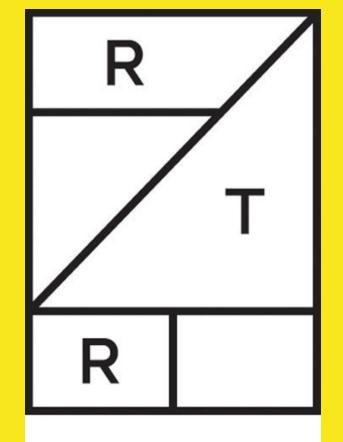
# Fitting The Data

Clifford Bridges Allan Kim Gayahan

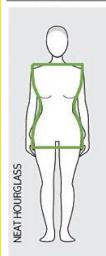


# ModCloth

RENT THE RUNWAY

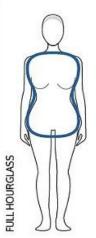
#### **Common Body Shapes and Verbiage**

#### WHAT IS YOUR BODY SHAPE?



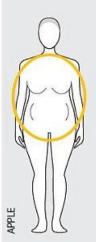
Your build is characterised by:

- A defined bust
- A defined waist
- A neat bottom
- Neat hips



Your build is characterised by:

- Bigger thighs
- A rounded bottom and hips
- A small waist
- · A full bust



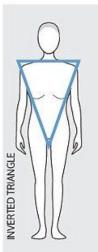
Your build is characterised by:

- Rounder shoulder line and flattish bottom
- Average to big bust
- Fullness around the middle
- Good legs



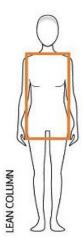
Your build is characterised by:

- Full hips or thighs, maybe saddle bags
- A defined waist
- Shoulders that are narrower than your hips
- A small top half as well as small bust



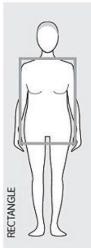
Your build is characterised by:

- Your bottom half is smaller than your top
- Little definition between waist and hips
- Flat hips and bottoms
- Straight and squared shoulder line



Your build is characterised by:

- Narrow shoulders
- Flat chest or small bust
- Small and non-defined waist
- Narrow hips and flat bottom



Your build is characterised by:

- Straight shoulder line and ribcage
- Straight hips and bottom
- Very little waist definition
- Average tummy

🗈 Michaela Jedinal

## **Ex. Null Hypotheses:**

For a given a dress, the proportion of ratings over 8 for body type "X" is equal to the proportion of reviews over 8 overall ( $\alpha$ =0.05).

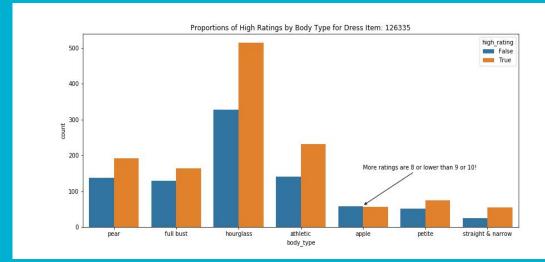
### **Ex. Alternative Hypotheses:**

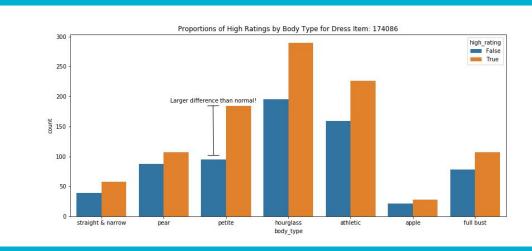
For a given a dress, the proportion of ratings over 8 for body type "X" is greater than the proportion of reviews over 8 overall.

**Reject the Null Hypothesis twice:** 

Apple body types are not a fan of 126355!

Petite body types really like 174086!





#### **Common Dress Styles for Body Type**



Hourglass

full bust and full hips with waist defenition

Triangle (Pear)

broader hips than shoulders

Round (Apple)

full bust and full hips without waist definitions

Inverted Triangle

broad shoulders and small hips

Rectangle

straight up and down proportions with very little waist definitions

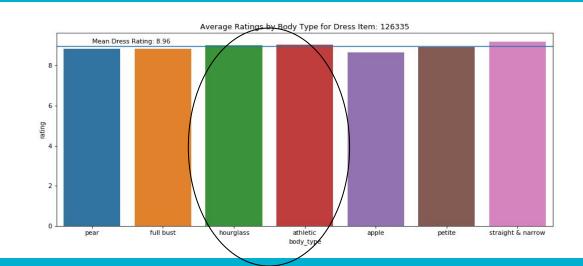
## **Null Hypothesis:**

For the given dress, the mean rating for reviewers with Athletic body type is equal to the mean rating for reviewers with Hourglass body type (**a**=0.05).

## **Alternative Hypothesis:**

For the given dress, the mean rating for reviewers with Athletic body type is not equal to the mean rating for reviewers with Hourglass body type.

Dress ID	Cohen's d = (mean_1 - mean_2) / pooled std
Dress 136110	0.0956
Dress 174086	-0.0399
Dress 130259	-0.0585
Dress 126335	0.0166





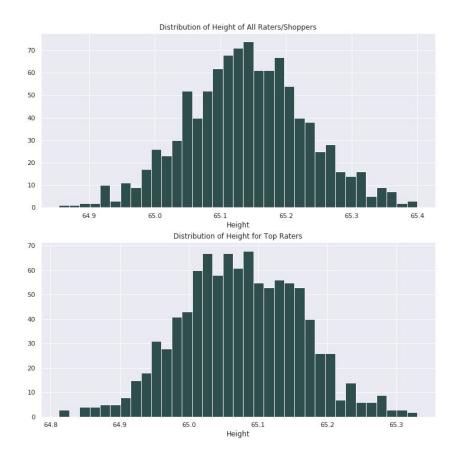
#### **Top Ratings has:**

**Fit** = 'fit'

**Length** = 'Just Right'

**Quality** = '4' or '5'

Based on the histogram, Top Raters Mean height = Population Mean Height



#### **Null:**

Mean Height for Top Raters are equal to the Population Mean Height

#### Alt:

Top Raters Mean Height not equal to Population Mean Height

#### **Results:**

p-value  $\approx 5.6 \times 10^{-36}$ 

Reject null



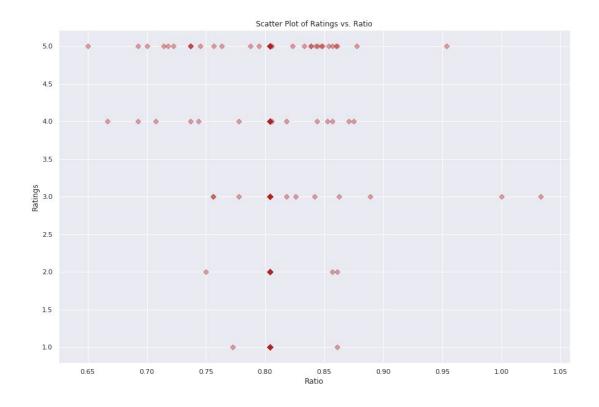
**Hip-Waist Ratio:** 

Low Risk < .80

 $.80 \le Moderate Risk < .85$ 

**High Risk ≥ .85** 

Low Risk and Mod Risk seems to rate the same.



**Null:** Mean Review for Low Risk Raters is equal to the Population Mean Review Mod Risk Raters

Alt: Mean Review for Low Risk Raters is not equal to the Population Mean Review Mod Risk Raters

#### **Result:**

P-value ≈ 0.37

Failed to reject Null



## **Future Goals**

Rent the Runway does not publish size charts for their garments!

Is this method better than letting the user pick their size from a size chart?

Rent The Runway user's get to self select body type!

Should Rent The Runway decide what body type the user is for them?

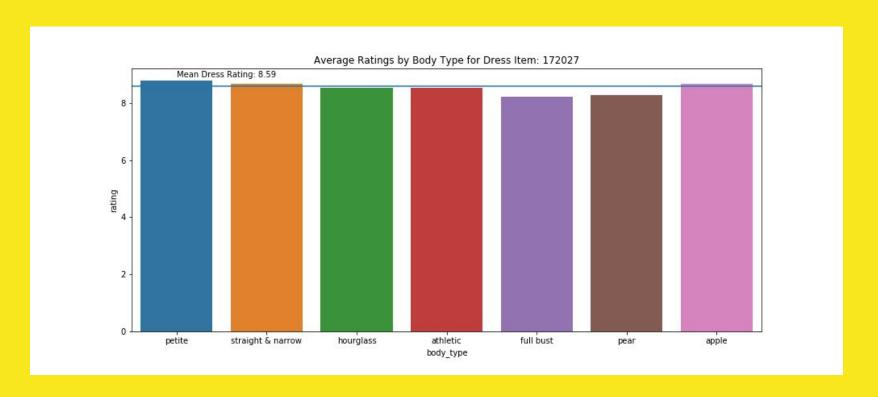


## Conclusion

- ➤ Identifying which garments tend to suit certain body types and guiding users appropriately will increase ratings
- Relying on Height would be useful to determine customer satisfaction/rating
- Using Hip to Waist Ratio would not be useful to determine a high rating

# Fun Extra Slides

Guess the type of dress based on body type review ratings!



# **Fun Extra Slides**

Shift Dresses

