This is a companion document to the Tableau workbooks and slides. Most of the plots are straightforward to reproduce, but sometimes it's useful for some finer steps. Here I give the key steps to making the plots. Daniel Turner (dturner@u.northwestern.edu) 7-26-2022

Part I – Nature Personality Study

Plot #1 (Demographic info)

1. Change wrong measures to dimensions
2. Plot Married by Age
3. Change Age to continuous
4. Average Age
5. Make aliases for Married based on codebook (from left menu, right click Aliases) (to UK, Never, Currently, Previously)
6. Drag Number of Records (Measures) to Marks > Label
7. Drag Gender to Columns
8. Make alias for Gender (0 unknown 1 male 2 female 3 other)
9. Color by Gender
10. Look: males are older than females in all categories
11. Rename the sheet Age Demographics
12. Title the plot

Plot #2 (Nature attitudes by personality survey answers)

1. Plot every A and every Tipi
2. A's have to be Dimensions; Average Tipi is Measure
3. Color by measure names
4. Rename the sheet Personality

Plot #3 (Nature attitudes by Education level)

1. Plot Education and Measure Values
2. Alias Education (0 unknown, 1 less than highschool, 2 high school, 3 university degree, 4 graduate degree
3. For measures values, only keep the A fields
4. Circle chart, colored by education
5. Rename the plot Education

Part II – ASD Study

Plot #4 (Boxplot version of Plot #3)

1. Duplicate Plot #4 and add Boxplots in Analytics pane
2. New plot title
3. Hiding versus filtering unknown "uk" values

Plot #5 (Histogram of autism scores by age)

1. Make a union of the three age groups

2. For the "+" (unioned) data source, plot Age (convert to dimension) by result
3. Plot age (combined) by autism (dimension) and the number of records, colored by table name
4. Bar plot
5. Looks like we have all the data, and it's not very balanced, which is pretty normal
6. Rename the sheet Age * ASD

Plot #6 (Linear regression and clustering over dot plot)

1. Dimensions: Age and Result
2. Mark: Circle (Plot A)
3. Analytics: Trend Line (Plot B)
4. Analytics: Clustering (Plot C)
5. Rename the Worksheet "Age * Result"

Plot #7 (Heatmap)

1. Duplicate Plot #6, change Mark to Density
2. Change Colors to desired palette

Part III – Linguistics Study

Plot #8 (F0 traces by emotion)

1. Subject N and Sample are Dimensions
2. Plot Sample X Avg(F0), Color by Emotion
3. Filter by isTarget (TRUE)
4. Adjust Axis to trim 0 intercept
5. Customize Emotion colors in legend

Plot #9 (F0 traces by pattern

1. Rename Tobi to Pitch Pattern
2. Duplicate previous plot, but color by Pitch Pattern instead of emotion
3. Thicker lines, 50% opacity

Plot #10 (duplicate 8 way figure with empirical F0 traces)

1. Pitch Pattern and Sample for Columns
2. Avg F0 for Rows
3. Filter only H-initial patterns
4. Duplicate previous plot, switch filter to Exclude
5. Add both Worksheets to a new Dashboard