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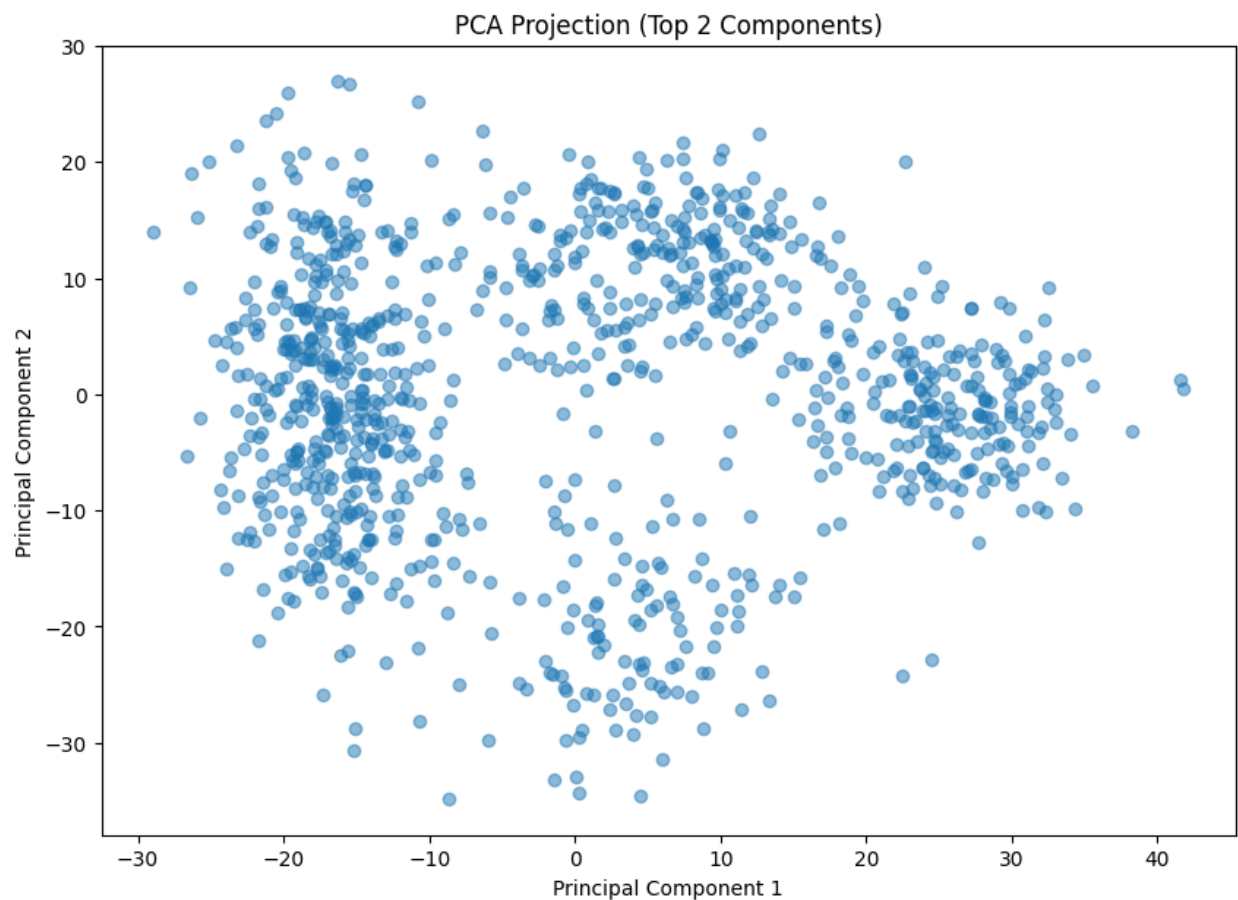
How to run:

Doesn't require any input. It will automatically generate all graphs (PCA,UMAP,tSNE)

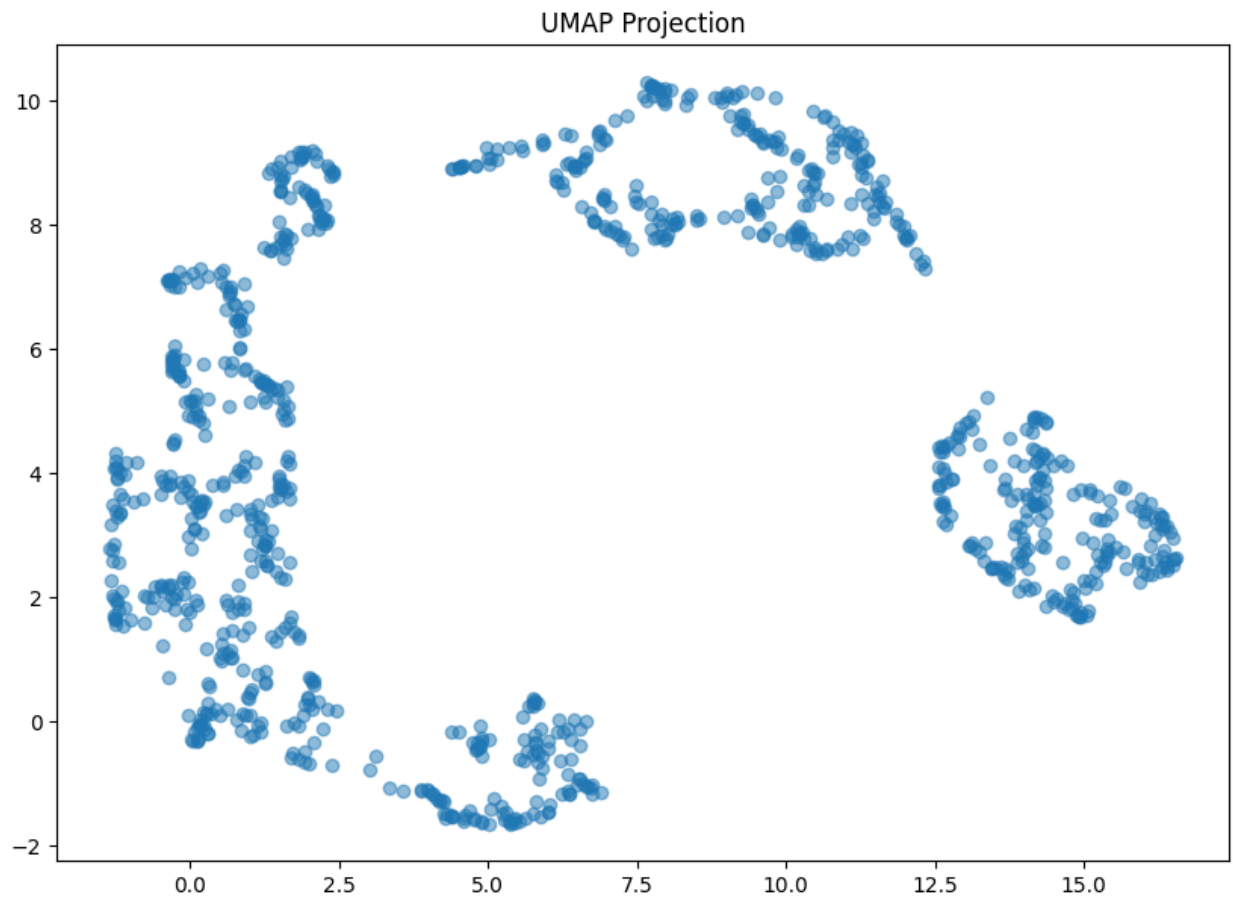
Hyperparameters:

Epochs in EM Algorithm: 1000

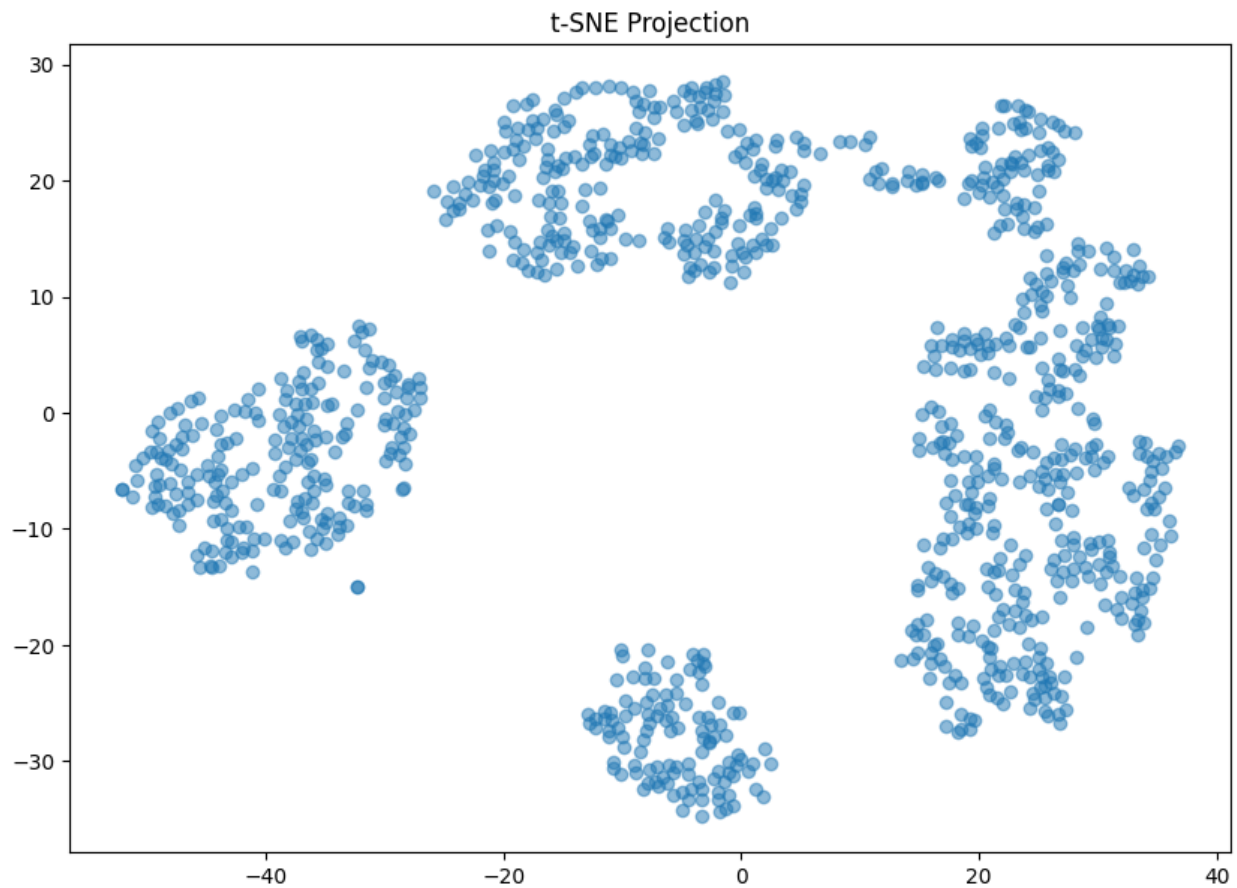
PCA-2D Scatter Plot:



UMAP:



tSNE:



Estimations:

Estimated mean number of children for families with family planning:

1.7823560858319492

Estimated mean number of children for families without family planning:

4.910675020426067

Estimated proportion of families with family planning: 0.355997915721007

Estimated proportion of families without family planning: 0.6440020842789931