

No π Charts

Datafest '22 - Team 05

Sayyed Faraz Mohseni

Magnus Magnusson

Lane Robert Lewis

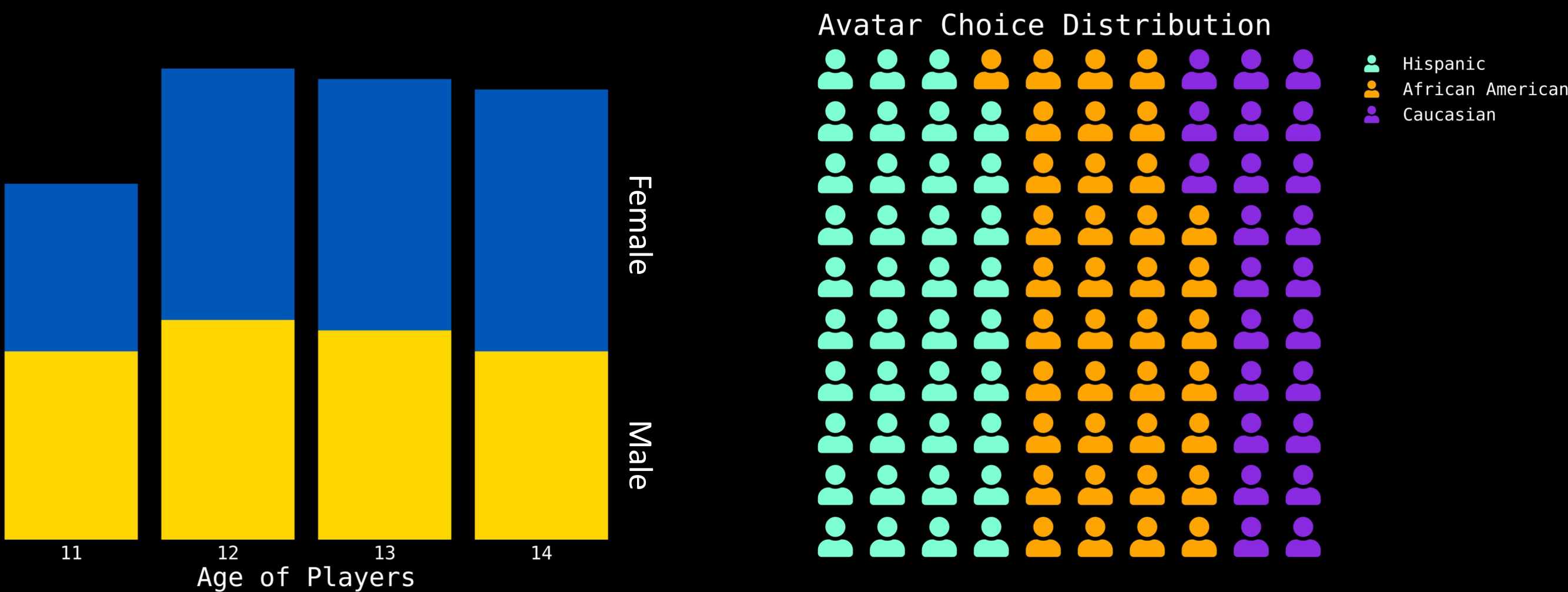
Akash Satpathy

Gary Bales

Data Engineering

Avatar Creation (Demographic) Akash

- Age, Gender, and Avatar choice



People Sense Minigame (Learning and Performance) Lane

- Number of attempts and slope from regressing score on number of attempts (peopleSenseLearn)



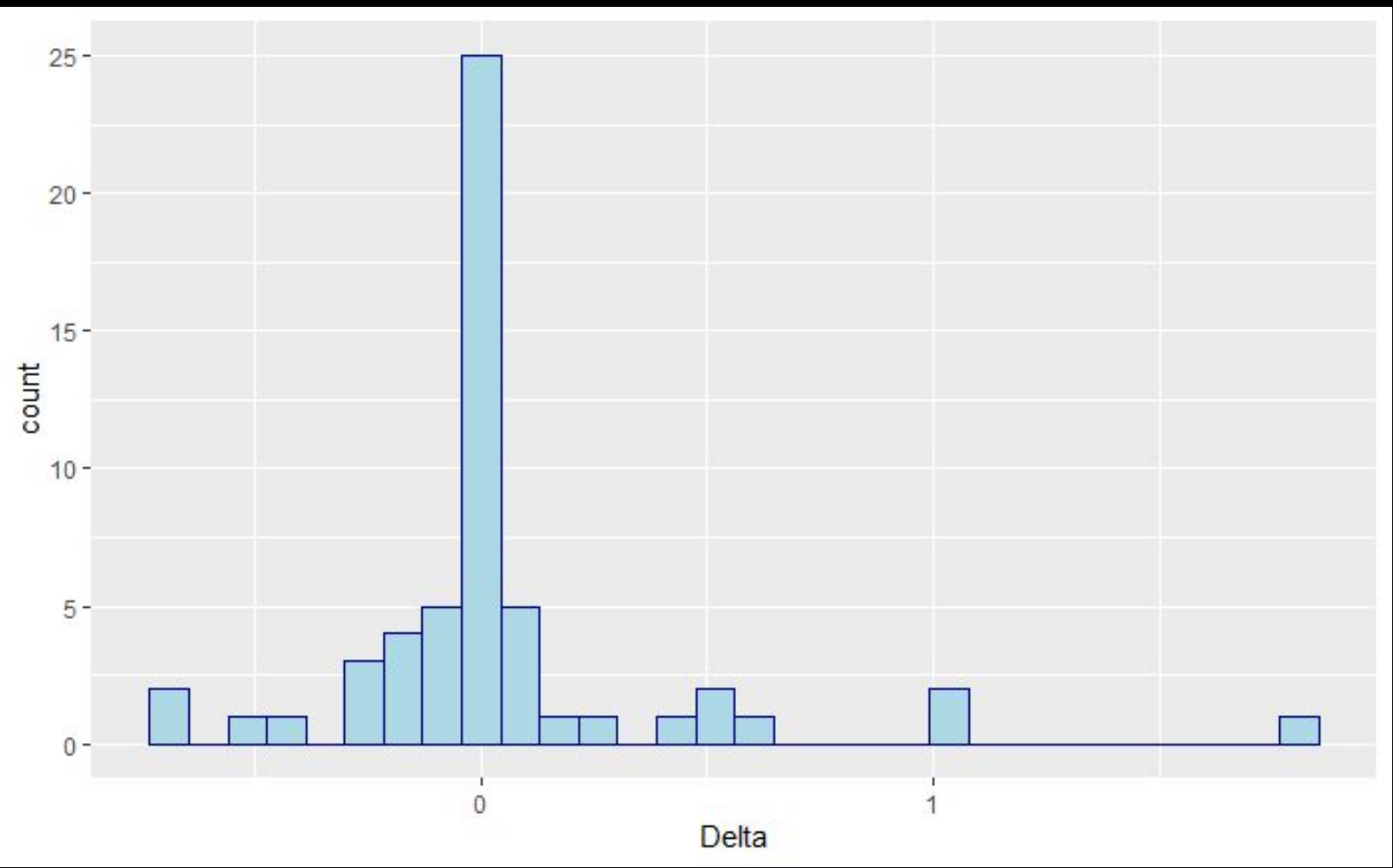
Aspirational Avatar (NLP) Sayyed

- Players write words that they think others associate with them
- Extracted use of positive, negative, career-oriented, and job-oriented language as well as the relative fraction of these over all of a subject's provided words

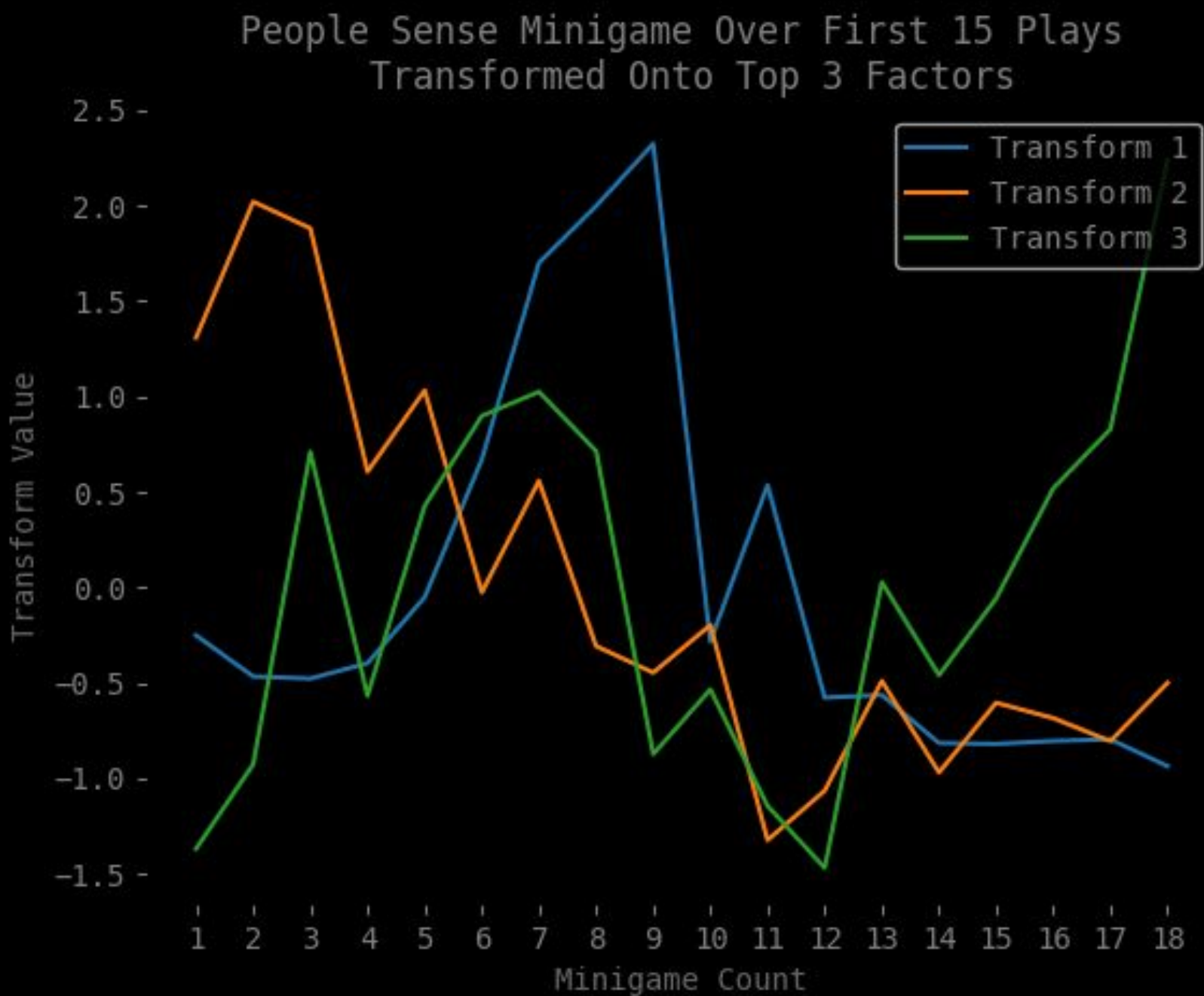


S5 Scores Gary

- Section 5 quizzes taken by some of the subjects
- 55 out of 166 took test multiple times, so we could track long term change.
- First score, last score, and total change (Delta) were extracted

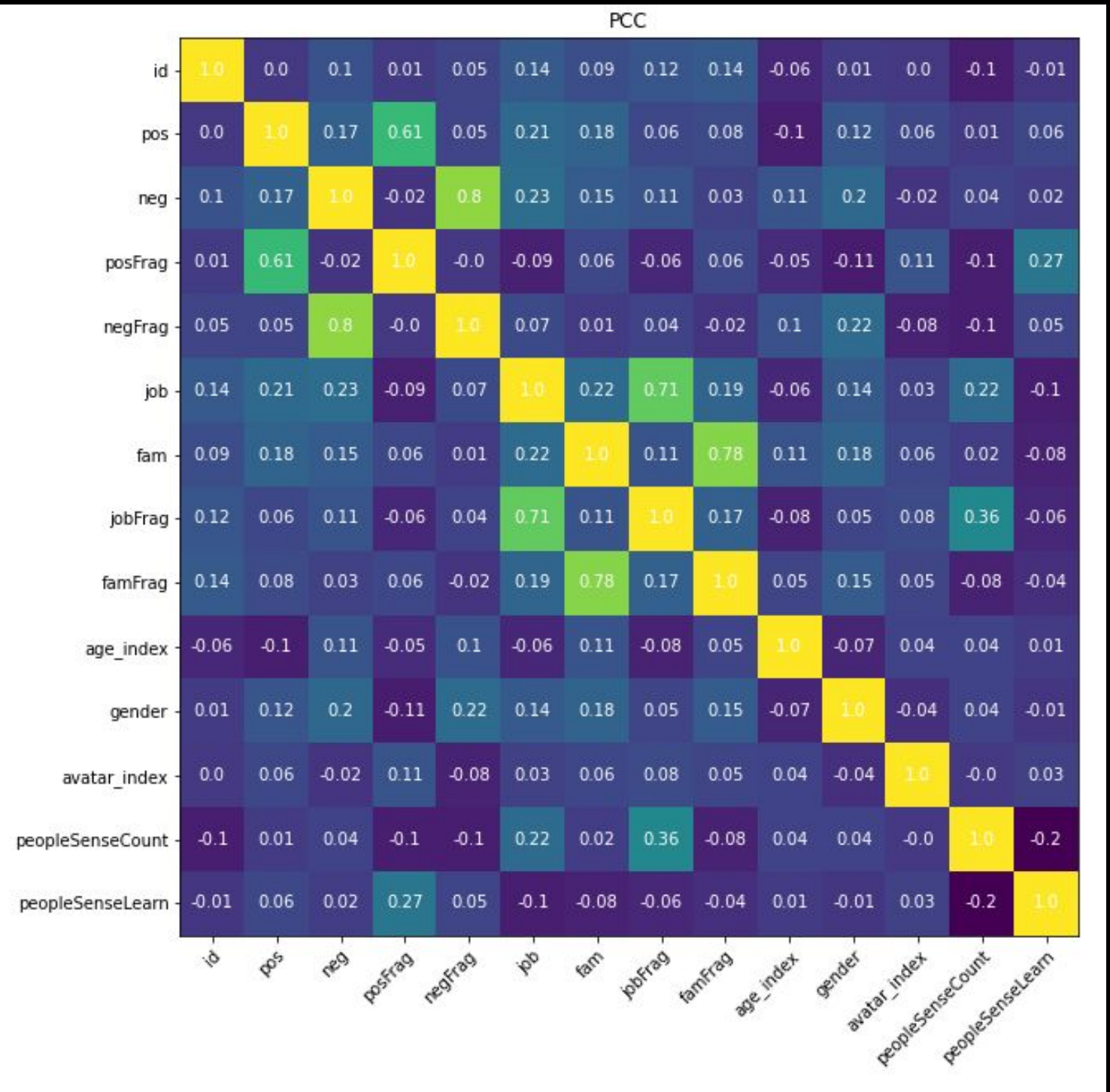


Results



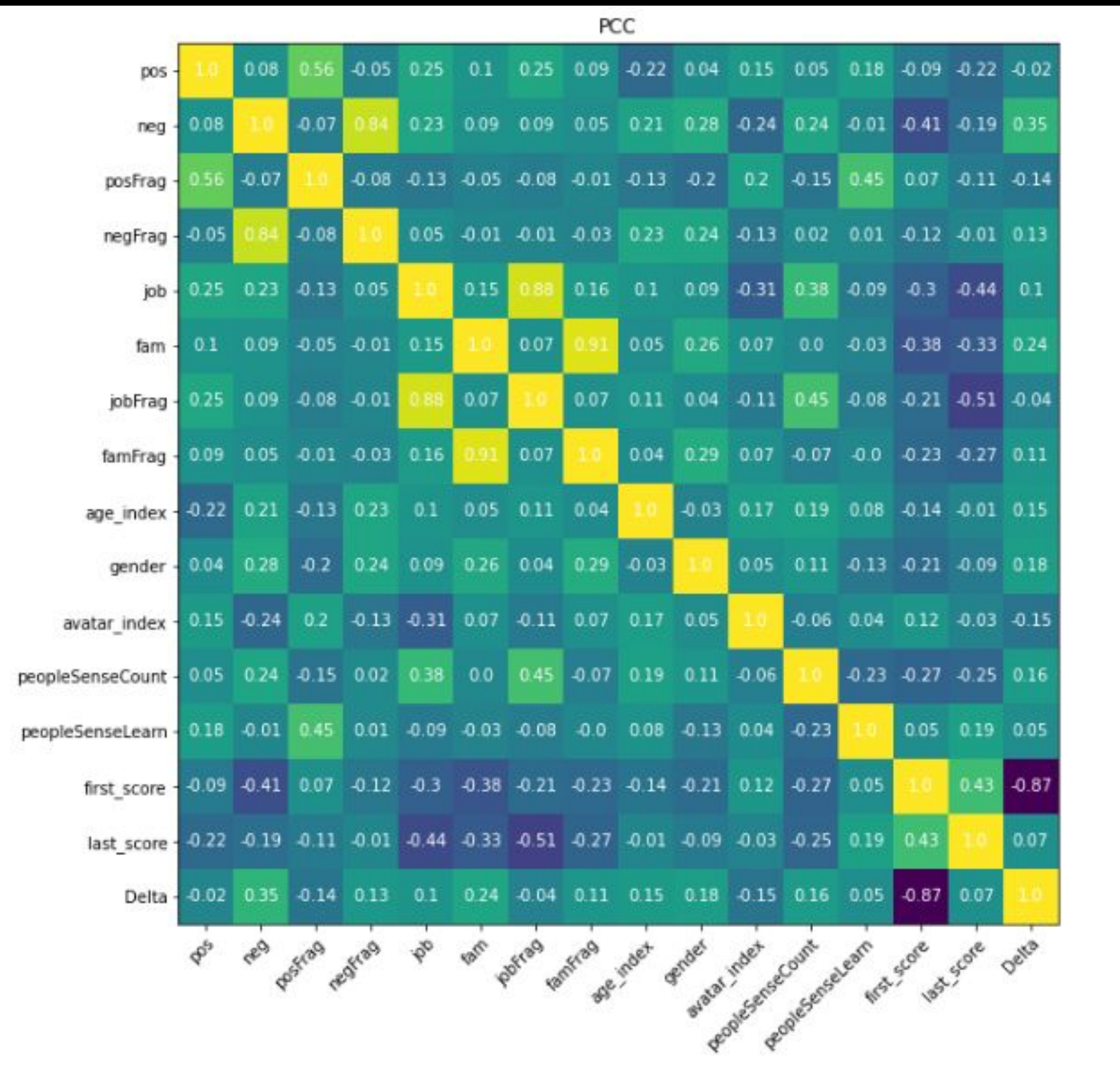
Unsupervised Analysis Lane

- EFA shows 3 main tracks:
learning, learning then decline,
and decline.
- Inspired a k-means clustering
approach when viewing scoring
data
- K-means clustering didn't show
anything noteworthy



PCC with Cleaned Set (n = 166) Sayyed

- Learning from playing People Sense
correlated with use of a positive adjective
~0.27
- It also correlated with use and higher fraction
of job-oriented language ~0.36
- Female avatar correlated with use of a
negative adjective ~0.2



PCC with Restricted Data Set (n = 55) Jacob

- Includes individuals with S5 scores
- People who use negative language did
not improve long term
- Of new points, interesting
correlations between score and
language/gender exist.

Conclusions and Recommendations

- S5 scores would be useful in evaluating game effectiveness for long term prevention of
risky behavior.
- Determining how players did across all four minigames instead of just People Sense
would
- Attempts to chart game progression were made to study the attention spans and
movement through the game space of different players, but the resulting plots were
difficult to interpret. Future studies should attempt to log data such that gameplay
progression could be tracked with ease.
- Emotes were available for the sentiment analysis but were not used. We believe it could
be another useful piece of the puzzle if also categorized into positive vs. negative emotion.