

PCA Analysis Results

| Principal Component | Explained Variance | Explained Variance (%) | Eigenvalue |
|---|--------------------|------------------------|------------------------|
| PC1 | 0.0353 | 3.53% | 0.0183 |
| PC2 | 0.0321 | 3.21% | 0.0167 |
| PC3 | 0.0208 | 2.08% | 0.0108 |
| PC4 | 0.0171 | 1.71% | 0.0089 |
| PC5 | 0.0154 | 1.54% | 0.0080 |
| Total explained variance (first 10 PCs): | | | 0.1808 (18.08%) |

Table 1: Explained variance and eigenvalues for the first five principal components.

Top 10 selected concepts (highest cosine similarity):

| Rank | Concept | Similarity |
|------|-----------|------------|
| 1 | someone | 0.6816 |
| 2 | inside | 0.6798 |
| 3 | somebody | 0.6705 |
| 4 | humans | 0.6684 |
| 5 | jealousy | 0.6483 |
| 6 | folks | 0.6480 |
| 7 | desperate | 0.6443 |
| 8 | face-off | 0.6414 |
| 9 | robbery | 0.6413 |
| 10 | stranger | 0.6388 |

Top 5 Positive/Negative Concepts for Each PC (1–5):

| PC | Top 5 Positive Concepts | | Top 5 Negative Concepts | |
|-----|-------------------------|--------|-------------------------|---------|
| PC1 | newark | 0.1924 | mantra | -0.1340 |
| | america | 0.1851 | bollywood | -0.1015 |
| | york | 0.1850 | love-song | -0.0783 |
| | american | 0.1848 | karma | -0.0695 |
| | hurricane | 0.1845 | love | -0.0677 |
| PC2 | suicide | 0.2036 | contemporaries | -0.0860 |
| | death | 0.1973 | professionalism | -0.0819 |
| | snake | 0.1951 | mid-sixties | -0.0802 |
| | stupid | 0.1911 | contemporary | -0.0765 |
| | raccoon | 0.1780 | mid-twenties | -0.0755 |
| PC3 | combat | 0.1720 | fiancee | -0.2790 |
| | weaponry | 0.1616 | girlfriend | -0.2664 |
| | samurai | 0.1550 | bride-to-be | -0.2624 |
| | bombardment | 0.1422 | fiance | -0.2505 |
| | wartime | 0.1395 | bride | -0.2503 |
| PC4 | infancy | 0.2108 | gangster | -0.2546 |
| | childhood | 0.1634 | actor | -0.2402 |
| | autumn | 0.1632 | gunman | -0.2182 |
| | orphanage | 0.1621 | bollywood | -0.2137 |
| | upbringing | 0.1575 | murderer | -0.1924 |
| PC5 | vocalist | 0.1941 | crime | -0.2339 |
| | motherhood | 0.1816 | criminal | -0.2015 |
| | actress | 0.1788 | extortion | -0.1916 |
| | teens | 0.1653 | bribery | -0.1876 |
| | co-ed | 0.1635 | businessman | -0.1833 |

Table 2: Top 5 most positive and negative concept words for each of the first five principal components.