

## Multimedia Appendix 6.

| Appendix E. Graph-Level Metrics.                          |       |       |       |            |       |       |       |         |       |                   |       |
|-----------------------------------------------------------|-------|-------|-------|------------|-------|-------|-------|---------|-------|-------------------|-------|
|                                                           | Pain  | #pain | Happy | Excitement | Sad   | Fear  | Tired | Anguish | Apple | Manchester United | Obama |
| <b>Nodes</b>                                              | 674   | 252   | 765   | 720        | 794   | 995   | 664   | 508     | 691   | 940               | 964   |
| <b>Edges</b>                                              | 432   | 161   | 438   | 531        | 482   | 828   | 364   | 379     | 526   | 827               | 770   |
| <b>Network Diameter</b>                                   | 2     | 1     | 1     | 2          | 1     | 2     | 2     | 2       | 2     | 2                 | 2     |
| <b>Average Path Length</b>                                | 1.011 | 1     | 1     | 1.004      | 1     | 1.002 | 1.011 | 1.003   | 1.019 | 1.001             | 1.024 |
| <b>Density</b>                                            | 0.001 | 0.003 | 0.001 | 0.001      | 0.001 | 0.001 | 0.001 | 0.001   | 0.001 | 0.001             | 0.001 |
| <b>Weakly Connected Components</b>                        | 252   | 97    | 328   | 197        | 315   | 171   | 301   | 136     | 179   | 127               | 229   |
| <b>Proportion of Weakly Connected Components to Nodes</b> | 0.37  | 0.38  | 0.43  | 0.27       | 0.40  | 0.17  | 0.45  | 0.27    | 0.26  | 0.14              | 0.24  |
| <b>Strongly Connected Components</b>                      | 672   | 252   | 765   | 717        | 792   | 993   | 663   | 505     | 691   | 939               | 963   |
| <b>Nodes within Giant Component</b>                       | 30    | 22    | 15    | 51         | 20    | 561   | 12    | 93      | 175   | 442               | 278   |
| <b>Edges within Giant Component</b>                       | 30    | 22    | 14    | 50         | 19    | 560   | 11    | 92      | 174   | 448               | 300   |
| <b>Percent of Nodes within Giant Component</b>            | 4%    | 9%    | 2%    | 7%         | 3%    | 56%   | 2%    | 18%     | 25%   | 47%               | 29%   |