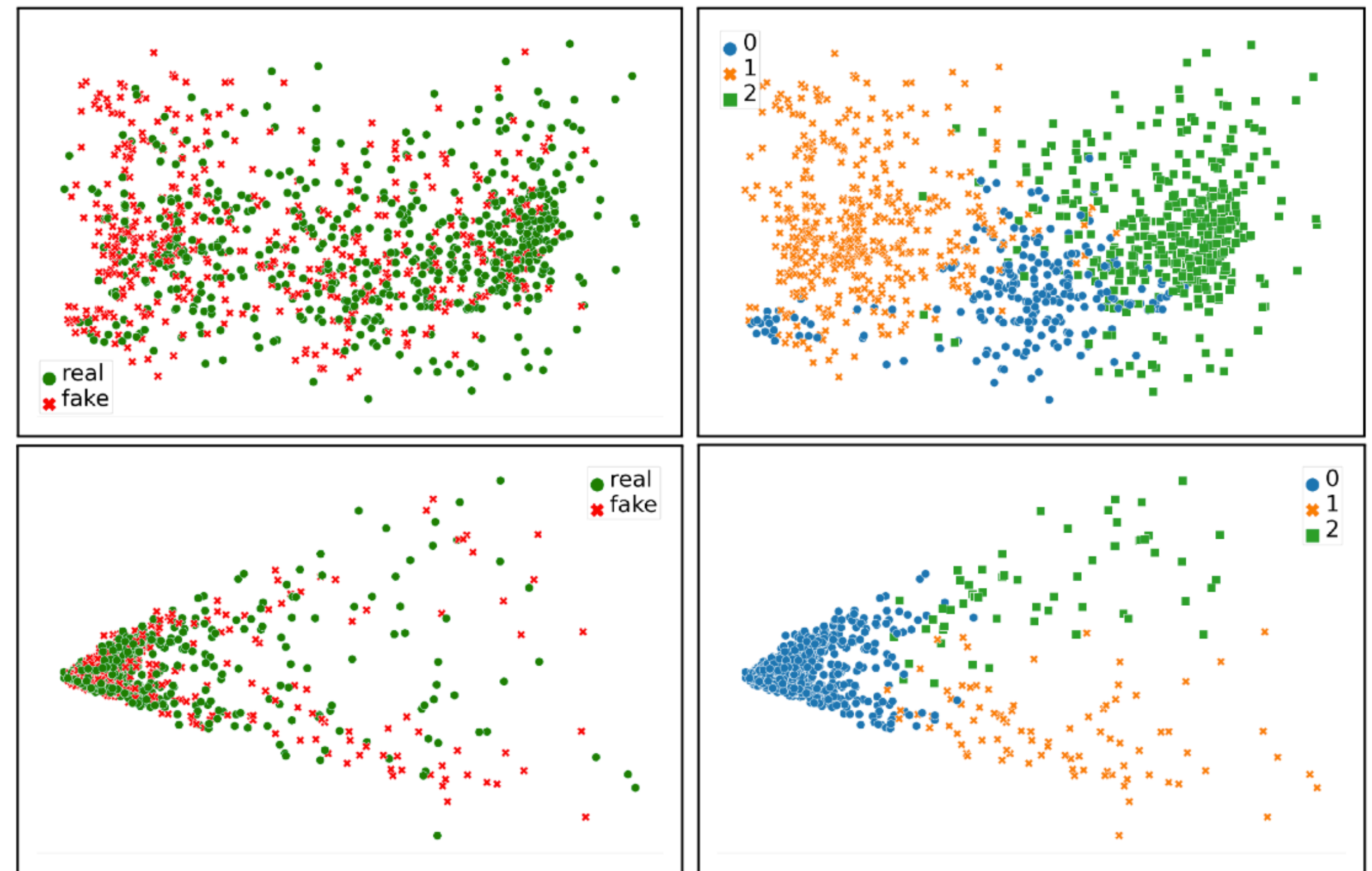# Discussion
RQ3: Representation Learning – Intrinsic Evaluation

- Homogeneity score

  - FANG (Top): 0.051

  - GCN (Bottom): 0.0006

- Demonstrates FANG's strong representation closeness within both the fake and the real news groups.

- Indicating that FANG yields improved representation learning over another fully supervised graph neural framework.

2D PCA plot of FANG's representation (Top), GCN's representation (Bottom)

Discussion
RQ3: Representation Learning – Extrinsic Evaluation

- Verify how generalizable the supervised source representations are for a new task: source factuality prediction.

- Dataset: 129 sources of high factuality & 103 sources of low factuality annotated using mediabiasfactcheck.com and politifact.com

- SVM binary classification with textual and FANG's contextual representation as input

- 0.2207 absolute F1 improvement (0.5842 → 0.8049) compared with textual feature baseline