

# Experiments

## RQ2: Ablation Study:

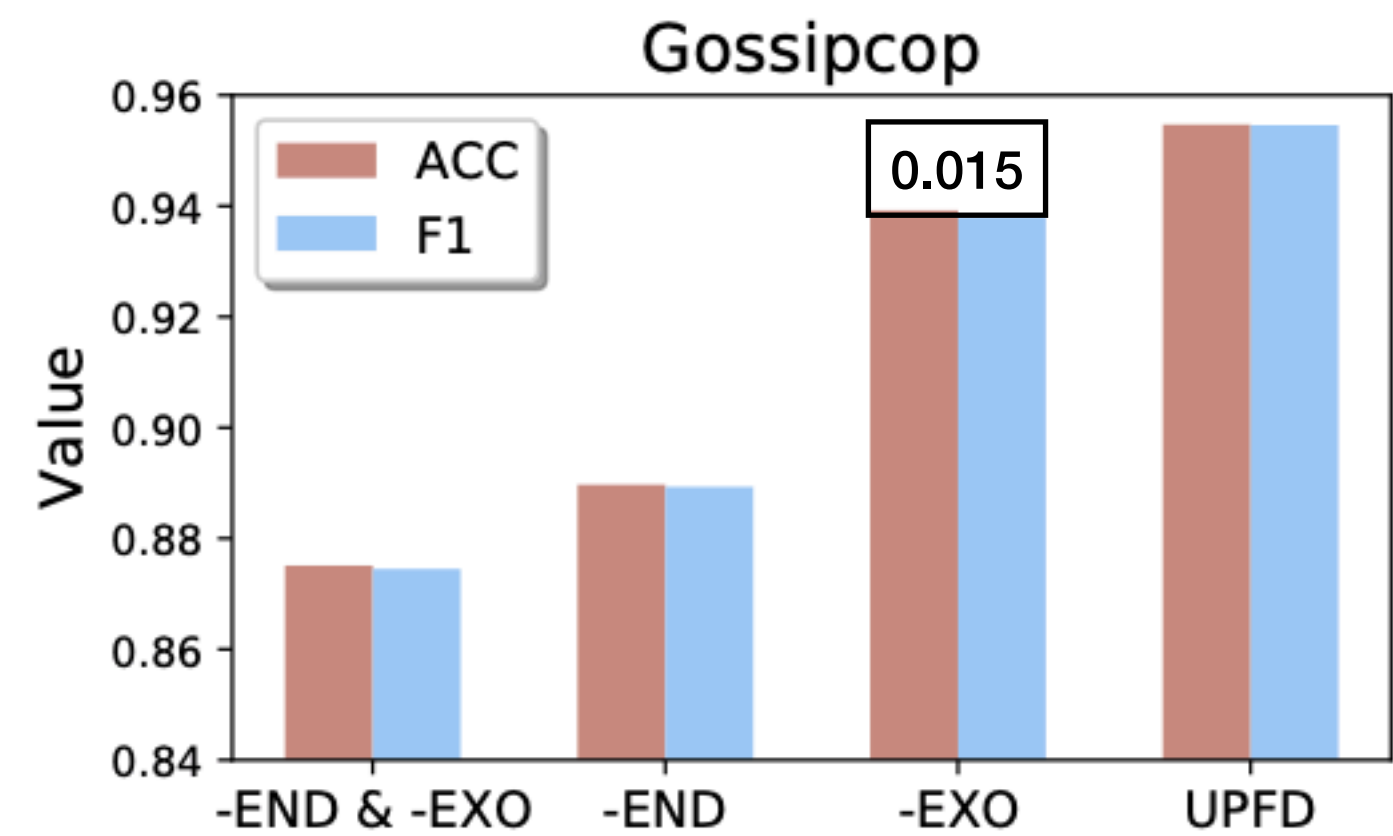
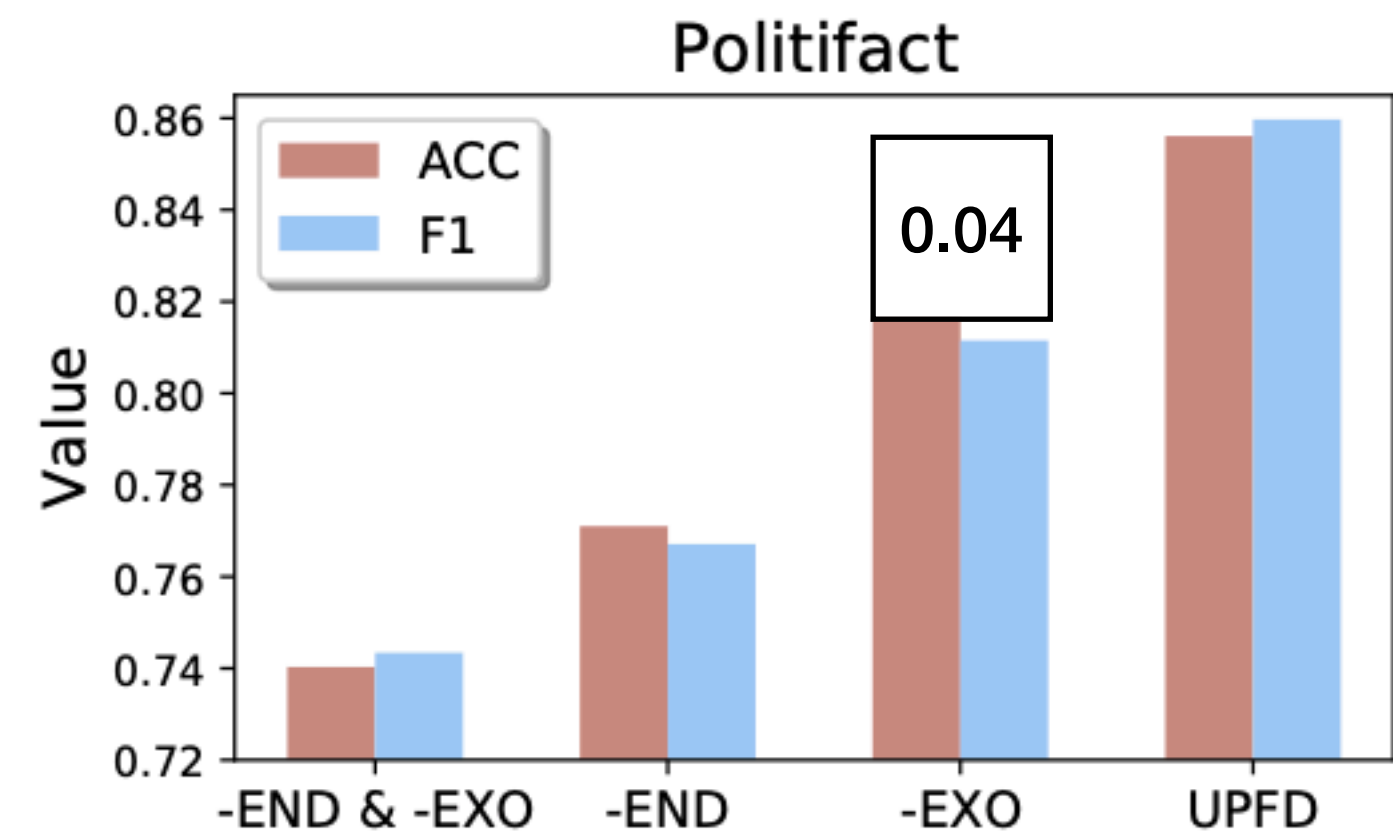
### Framework Variants

- Design 3 UPFD variants that remove the endogenous info, exogenous info or both of them.
- Employ the GCNFN (word2vec) as the graph (text) encoder for both datasets, and remove news concatenation to ensure a fair comparison
- –*EXO* is implemented by removing all edges in the news propagation graph, thus encodes the news embedding solely based on node features without exchanging information between nodes
- –*END* takes the user profile as node features and doesn't contain user endogenous preference information.
- –*EXO* & –*END* replaces the node features of the –*EXO* with user profile features

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## RQ2: Ablation Study: Framework Variants

- Find that removing either component from the UPFD will reduce its performance
- Indicates that exogenous information (i.e., news propagation graph) is more informative on Politifact since removing it results in a larger performance drop (0.04)
- Obvious that endogenous information contributes more to performance gain than exogenous information
- This observation further verifies the necessity of modeling user endogenous preferences.



	POL		GOS	
	ACC	F1	ACC	F1
-EXO	81.63	81.15	93.92	93.81
UPFD	<u>85.61</u>	<u>85.97</u>	<u>95.47</u>	<u>95.46</u>