# Experiments
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 <u>on Politifact</u> 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.
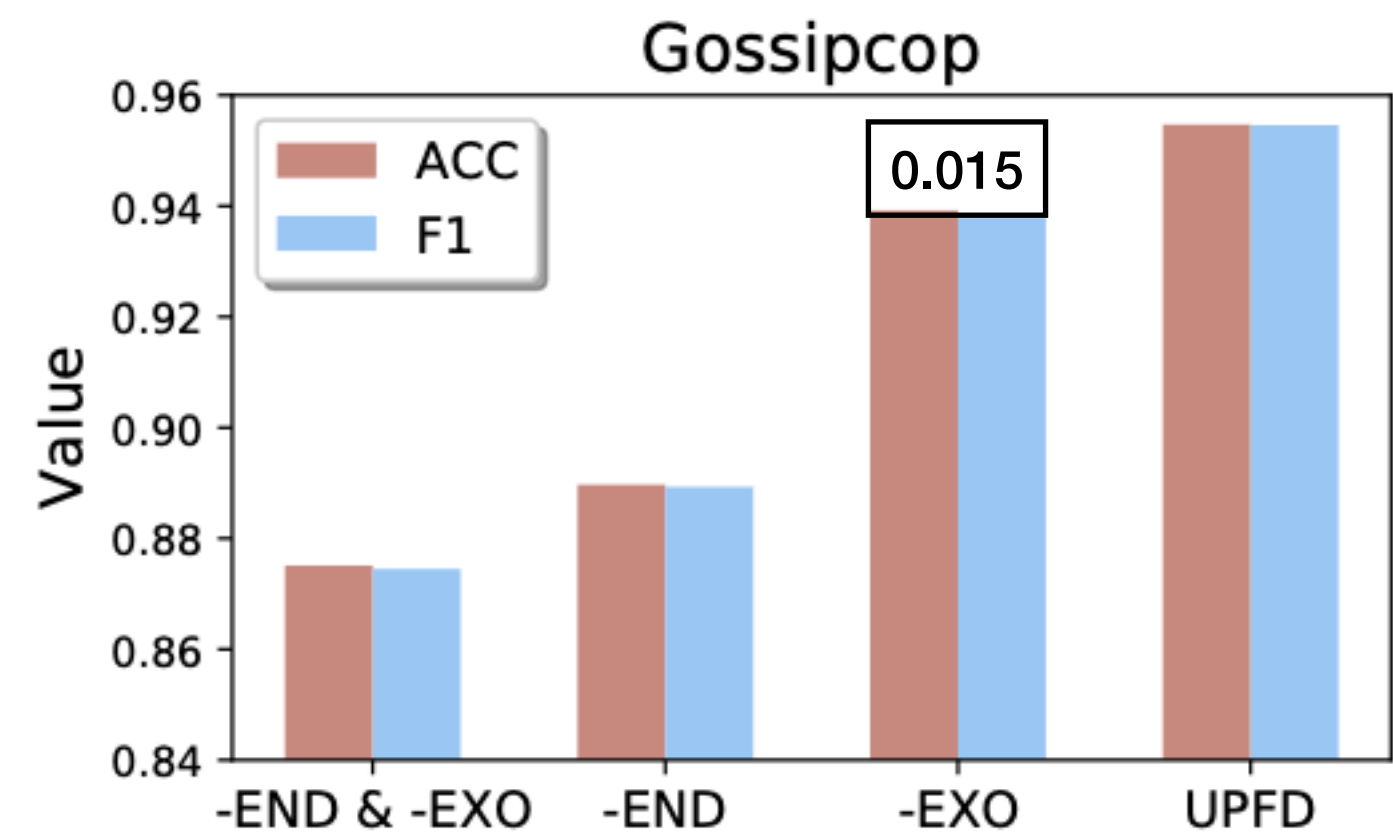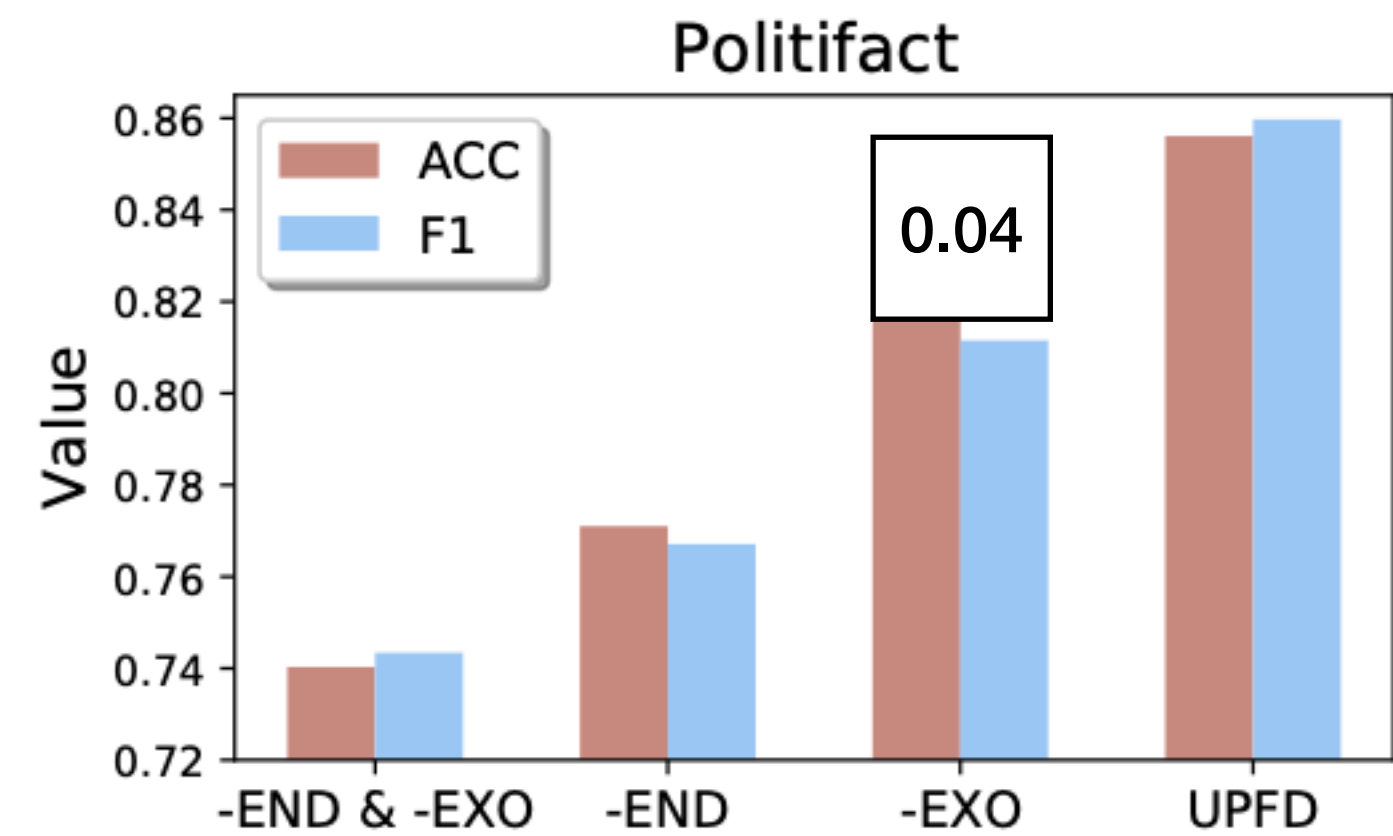
	POL		GOS	
	ACC	F1	ACC	F1
–EXO	81.63	81.15	93.92	93.81
UPFD	<u>85.61</u>	<u>85.97</u>	<u>95.47</u>	<u>95.46</u>

Conclusion

- Argues that **user endogenous news consumption preference** plays a vital role in the fake news detection problem.

- Collect the user historical posts to implicitly model the user preference and leverage the news propagation graph on social media as the exogenous social context of users.

- UPFD is proposed to fuse the endogenous and exogenous information and predict the news' credibility on social media.

- Experimental results demonstrate the advantage of modeling the user endogenous preference