

	Acc.	NR $F_1$	FR $F_1$	TR $F_1$	UR $F_1$
BiGCN	0.837±0.002 *	0.813±0.003 *	0.846±0.004 *	0.892±0.003 *	0.798±0.002 *
EBGCN	0.846±0.002 *	0.821±0.006 *	0.857±0.005 *	0.889±0.002 *	0.816±0.003 *
RDEA	0.866±0.003 *	0.875±0.006 *	0.872±0.005 *	0.894±0.003 *	0.820±0.006 *
TrustRD	0.866±0.004 *	0.875±0.005 *	0.871±0.005 *	0.896±0.004	0.821±0.003 *
KPG	0.893±0.003	0.921±0.004	0.898±0.009	0.903±0.002	0.847±0.002

Table 1: The standard deviation values and significant test results on Twitter15. A star symbol (\*) indicates that our KPG significantly outperforms the baseline on the respective metric, as confirmed by a paired t-test. We compared our KPG with the *Top-4* baselines without using additional information and omitted other baselines where improvement of our KPG is notable.

	Acc.	NR $F_1$	FR $F_1$	TR $F_1$	UR $F_1$
BiGCN	0.854±0.002 *	0.795±0.012 *	0.829±0.035	0.919±0.016	0.874±0.034
EBGCN	0.854±0.004 *	0.796±0.007 *	0.835±0.010	0.916±0.007 *	0.868±0.005 *
RDEA	0.865±0.004 *	0.847±0.009 *	0.819±0.005 *	0.922±0.002	0.868±0.006 *
TrustRD	0.869±0.002 *	0.844±0.005 *	0.827±0.003 *	0.929±0.004	0.874±0.004 *
KPG	0.889±0.004	0.894±0.006	0.836±0.006	0.930±0.007	0.896±0.006

Table 2: The standard deviation values and significant test results on Twitter16. A star symbol (\*) indicates that our KPG significantly outperforms the baseline on the respective metric, as confirmed by a paired t-test. We compared our KPG with the *Top-4* baselines without using additional information and omitted other baselines where improvement of our KPG is notable.

	Acc.	R $F_1$	NR $F_1$
BiGCN	0.841±0.003 *	0.842±0.003 *	0.841±0.002 *
EBGCN	0.839±0.002 *	0.841±0.002 *	0.837±0.002 *
RDEA	0.842±0.003 *	0.843±0.003 *	0.842±0.003 *
TrustRD	0.846±0.002 *	0.846±0.002 *	0.846±0.002 *
KPG	0.859±0.004	0.863±0.004	0.854±0.004

Table 3: The standard deviation values and significant test results on PHEME. A star symbol (\*) indicates that our KPG significantly outperforms the baseline on the respective metric, as confirmed by a paired t-test. We compared our KPG with the *Top-4* baselines without using additional information and omitted other baselines where improvement of our KPG is notable.

	Acc.	R $F_1$	NR $F_1$
BiGCN	0.905±0.001 *	0.907±0.001 *	0.904±0.001 *
EBGCN	0.872±0.003 *	0.900±0.019 *	0.867±0.004 *
RDEA	0.920±0.002 *	0.921±0.002 *	0.919±0.002 *
TrustRD	0.919±0.002 *	0.920±0.002 *	0.917±0.002 *
KPG	0.949±0.002	0.949±0.002	0.948±0.003

Table 4: The standard deviation values and significant test results on Weibo22. A star symbol (\*) indicates that our KPG significantly outperforms the baseline on the respective metric, as confirmed by a paired t-test. We compared our KPG with the *Top-4* baselines without using additional information and omitted other baselines where improvement of our KPG is notable.