Online Appendix

Panel A: Additional Tables

Table A1: The Parallel Trend Test for the Main Dependent Variables

	Sponsored		Organic	
	Linear	**Poisson**	**Linear**	**Poisson**
	(1)	(2)	(3)	(4)
Lead 4	-0.050	-0.186	-0.138	0.172*
	(0.043)	(0.221)	(0.166)	(0.093)
Lead 3	-0.032	-0.042	-0.221	0.162**
	(0.037)	(0.181)	(0.146)	(0.082)
Lead 2	-0.063	-0.252	-0.109	0.035
	(0.043)	(0.214)	(0.125)	(0.061)
Lag 1	-0.101**	-0.447***	-0.224*	-0.119**
	(0.030)	(0.130)	(0.130)	(0.053)
Lag 2	-0.091*	-0.349**	-0.292	-0.143**
	(0.041)	(0.153)	(0.192)	(0.071)
Lag 3	-0.095*	-0.331**	-0.582***	-0.226***
	(0.047)	(0.157)	(0.177)	(0.076)
Lag 4	-0.161**	-0.686***	-0.312*	-0.129*
	(0.045)	(0.171)	(0.185)	(0.078)
Lag 5	-0.123*	-0.512**	-0.581***	-0.131
	(0.063)	(0.244)	(0.188)	(0.085)
User FE	Yes	Yes	Yes	Yes
Week FE	Yes	Yes	Yes	Yes
# obs	35,991	14,942	35,991	34,131
R-squared	0.011		0.025	

Note: The raw number of sponsored posts is used as the dependent variable in columns (1) and (2). The raw number of organic posts is used as the dependent variable in columns (3) and (4). Linear model is applied in columns (1) and (3) and Poisson model is applied in columns (2) and (4). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A2: The Different Impacts of the Marketplace's Launch on the Sponsored and Organic Content for Top-tier and Medium-tier Influencers Using Poisson Models

	Top-tier Influencers		Medium-tier Influencers		All	
	Sponsored	**Organic**	**Sponsored**	**Organic**	**Sponsored**	**Organic**
	(1)	(2)	(3)	(4)	(5)	(6)
after	0.036	0.090***	0.386***	0.303***		
	(0.040)	(0.032)	(0.147)	(0.056)		
top*after					-0.350*	-0.213***
					(0.152)	(0.065)
# obs	19,189	19,189	16,802	16,802	35,991	35,991
User FE	Yes	Yes	Yes	Yes	Yes	Yes
Week FE	No	No	No	No	Yes	Yes

Note: The raw number of sponsored posts is used as the dependent variable in columns (1), (3), and (5). The raw number of organic posts is used as the dependent variable in columns (2), (4), and (6). Top is a dummy that represents whether a user is a top-tier influencer. Poisson model is applied in all specifications. *** p < 0.01, ** p < 0.05, * p < 0.1.

Table A3: Regression Results Using Celebrity and Amateur Users as the Control Group Separately

	Sponsored		**Organic**		**Percentage of Sponsored Content**	
	Celebrities	**Amateurs**	**Celebrities**	**Amateurs**	**Celebrities**	**Amateurs**
	(1)	(2)	(3)	(4)	(5)	(6)
influencer*after	-0.029	0.007	0.176	0.027	0.040	-0.004
	(0.060)	(0.008)	(0.162)	(0.152)	(0.036)	(0.005)
Medium *after	0.080**	0.080**	0.266*	0.266*	-0.014**	-0.014**
	(0.034)	(0.034)	(0.138)	(0.138)	(0.006)	(0.006)
User FE	Yes	Yes	Yes	Yes	Yes	Yes
Week FE	Yes	Yes	Yes	Yes	Yes	Yes
# obs	37,059	37,820	37,059	37,820	23,516	23,207

Note: The raw number of sponsored posts is used as the dependent variable in columns (1) and (2). The raw number of organic posts is used as the dependent variable in columns (3) and (4). The percentage of sponsored content is used as the dependent variable in columns (5) and (6). We use celebrity users as the control group in columns (1), (3), and (5). We use amateur users as the control group in columns (2), (4), and (6). Influencer is a dummy that indicates whether a user is an influencer, and medium is a dummy that represents whether a user is a medium-tier influencer. Linear model is applied in all specifications. *** p < 0.01, ** p < 0.05, * p < 0.1.

Table A4: Excluding KOLs With Over One Million Followers

	Top-tier Influencers			**All**		
	Sponsored	**Organic**	**Percentage of Sponsored Content**	**Sponsored**	**Organic**	**Percentage of Sponsored Content**
	(1)	(2)	(3)	(4)	(5)	(6)
after	0.005	0.327***	-0.001			
	(0.008)	(0.111)	(0.004)			
top*after				-0.083**	-0.214	0.011*
				(0.034)	(0.148)	(0.006)
User FE	Yes	Yes	Yes	Yes	Yes	Yes
Week FE	No	No	No	Yes	Yes	Yes
# obs	16,306	16,306	11,562	33,108	33,108	20,381
R-squared	0.000	0.003	0.000	0.010	0.024	0.015

Note: This table shows the results of the analyses in Tables 3 and 4 by excluding data from influencers with over one million followers. The raw number of sponsored posts is used as the dependent variable in columns (1) and (4). The raw number of organic posts is used as the dependent variable in columns (2) and (5). The percentage of sponsored content is used as the dependent variable in columns (3) and (6). Top is a dummy that represents

whether a user is a top-tier influencer. Linear model is applied in all specifications. *** p < 0.01, ** p < 0.05, * p < 0.1.

Table A5: The Placebo Test of Alternative Treatment Time

	All		
	Sponsored	**Organic**	**Percentage of Sponsored Content**
	(1)	(2)	(3)
top*after	-0.001	0.095	0.004
	(0.048)	(0.117)	(0.007)
User FE	Yes	Yes	Yes
Week FE	Yes	Yes	Yes
# obs	11,610	11,610	6,444
R-squared	0.016	0.028	0.029

Note: This table shows the main results with a hypothetical treatment period eight weeks prior to the actual treatment. The raw number of sponsored posts is used as the dependent variable in column (1). The raw number of organic posts is used as the dependent variable in column (2). The percentage of sponsored content is used as the dependent variable in column (3). Top is a dummy that represents whether a user is a top-tier influencer. Linear model is applied in all specifications. *** p < 0.01, ** p < 0.05, * p < 0.1.

Panel B: Online Experiment on Prolific

To further validate our argument, we designed a randomized online experiment using Prolific. This experiment aimed to directly assess the impact of sponsorship frequency on influencer popularity at the influencer level. In particular, in this online experiment, we would like to directly validate "the more sponsored posts an influencer makes, the less popular this influencer will become." The study used a between-subject design**,** with each participant randomly assigned to one of two conditions: high-sponsorship or low-sponsorship.

- High-Sponsorship Condition: Participants were exposed to four influencer profiles (two high-tier and two medium-tier), each profile consisting of two sponsored posts with a clear "Sponsored" label.

- Low-Sponsorship Condition: Participants were shown the same four influencer profiles, but with the same two posts without the "Sponsored" label per profile.

In both conditions, the order of the influencer profiles was randomized across participants. Participants were then asked about their willingness to follow the influencer, which served as a proxy for influencer popularity. We included manipulation checks and demographic questions to ensure the validity of the data. Additionally, we carefully selected posts with similar engagement metrics (likes and comments) to control for baseline post popularity. We also ensured that participants had prior experience using social media.

Our results provide support for our conjecture, leveraging responses that pass the manipulation check (109 participants from the treatment group, and 80 participants from the control group). The main outcome variable is participants' response to whether they would like to follow this influencer in the future, with a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). We first use t-tests to compare experiment participants in the treated group and control group, finding that those in the control group (without sponsored content) are more likely to follow influencers after reading their posts, indicating a more positive evaluation of their profiles. In addition, we construct a dummy which equals 1 if a participant responds 4 or higher to this answer, representing whether a participant is willing to follow the corresponding influencer. A comparison between participants in the treated and control groups in terms of this dummy outcome also shows that those in the control group have a higher probability of following the influencer. The results for both t-tests are reported in Table B1 below.

Table B1: Summary Statistics and T-test Results of the Online Experiment

	Treated group (with sponsorship)	**Control group (without sponsorship)**	**Difference**	**T-stats**
Raw response	4.438	4.679	-0.241	1.696*
Dummy response	0.665	0.766	-0.100	3.015***

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Furthermore, we also conduct regression analysis to further corroborate our empirical findings. The dependent variable is either the raw response or the dummy response. For the dummy dependent variable, in addition to linear models, we also apply logistic and probit models to analyze the impact. The main independent variable is whether this response is from a control participant or a treated one. We also add influencer dummies, gender, age, whether employed, and household income buckets in the regression to control for demographic characteristics and influencer impacts. The results are shown in Table 10 in our manuscript. Overall, we have consistently found that experiment participants are less likely to follow influencers with sponsored content, which indicates social media users' negative evaluation of sponsored content among influencers.

Our results confirmed that profiles with higher sponsorship levels led to lower popularity and less favorable sentiment among participants. This provides further evidence for the underlying mechanism behind influencers' strategic content choices—namely, that they are aware of the potential negative impact of sponsored posts on their popularity.