Methodology

To conduct this analysis, researchers obtained data from Facebook's API for lawmakers' official Facebook accounts, defined as those that are linked to a member's Senate.gov or House.gov profile page. The analysis evaluated all members who were in office from Jan. 1 to July 25, 2017, though lawmakers who left office during the study period are excluded. Independents who caucus with Democrats are treated as Democrats. Non-voting members are excluded. To ensure that only active Facebook accounts were included, researchers limited the sample to members with more than 10 posts. This resulted in a sample of 514 Facebook pages.

To estimate the number of followers for each member, researchers obtained the total number of page likes for every member of Congress. Those who "like" a page automatically follow that page. Some individuals might choose to unfollow a member at a later point in time while still liking the page; Facebook does not make the number of active followers separately available.

To test that the relationship between ideology and followers wasn't being driven by other, possibly related factors, such as tenure in office, researchers turned to multiple regression analysis, a statistical technique designed to model the relationship between one variable – in this case, page followers – and each of a number of independent variables. For members of the House, the model contained an indicator variable for party; the number of previous terms served; an indicator variable for leadership status; and a count of all posts created on the member's page. (Researchers took the base 10 logarithm of the number of followers, the number of posts on each page, and number of terms served in order to adjust for outlier values.) For members of the Senate, the model included the same variables, in addition to an indicator variable to account for whether the member was a presidential candidate in 2008, 2012 or 2016. In both legislative chambers, and for models estimated separately by party, there is a strong and statistically significant relationship between the absolute value of the ideology scores and the number of Facebook followers.

It is also conceivable that the relationship between ideology and followers might be impacted in some way by the fact that senators from more populous states have more constituents. To account for this possibility, researchers divided the number of Facebook followers by each member's number of constituents, according to the U.S. Census Bureau's 2015 American Community Survey, and estimated regression models with that ratio as the dependent variable. The ideological gap remains consistent even with this adjustment.

Ordinary least squares regression: Predicting Facebook followers

This analysis at the member of Congress level shows the attributes of individual elected officials that are associated with a higher number of Facebook followers. The absolute value of DW-NOMINATE strongly predicts additional followers in both the House and the Senate. Being a Republican is associated with fewer followers in each chamber, and in the House, those who serve more terms, party leaders, and those who create more posts have more followers. In the Senate, the only other attribute that is significantly associated with a high number of followers is having been a presidential candidate.

| | Log (total page followers) | |
	House	Senate
|DW-NOMINATE|	0.493**	1.275**
	(0.143)	(0.318)
Republican	-0.106*	-0.564**
	(0.042)	(0.111)
Log (terms in Congress)	0.384**	-0.024
	(0.058)	(0.140)
Party leader	1.323**	0.591
	(0.282)	(0.346)
Presidential candidate		1.374**
		(0.228)
Log (total Facebook posts)	0.230**	0.163
	(0.063)	(0.178)
Constant	3.192**	3.944**
	(0.171)	(0.451)
N	424	90
R²	0.20	0.51
Adj. R²	0.19	0.48