News Item

Burst of the Filter Bubble?: Effects of Personalization on the Diversity of Google News | ResearchGate

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> Empirical evidence on the existence of filter-bubble effects, especially in the context of news, is limited. One study found small effects in that Facebook users see more-than-average posts from politically like-minded users (Bakshy, Messing, & Adamic, 2015). Yet, the study has faced several methodological criticisms, such as building upon self-reported political orientation (Pariser, 2015). Apart from social network sites, personalization effects have been looked at within search engines, revealing almost none (e.g., Flaxman, Goel, & Rao, 2016; Haim, Arendt, & Scherr, 2017) or only minor (e.g., Feuz, Fuller, & Stalder, 2011; Hannak et al., 2013) effects of partial information blindness.
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> The aim of this study is to contribute further evidence by investigating how—both implicit and explicit—personalization of an online news aggregator affects both content and source diversity. To the best of our knowledge, this is the first study to analyze the effects of personalization on news diversity for news aggregators. For this, we focus on Google News (https://news.google.com/), one of the most-visited online news aggregators (Newman et al., 2016, p. 12). Google News claims to present headlines which “are selected by computer algorithms based on your past activity on Google” (Google, 2017a) while at the same time “working to make sure that [the front page of Google News] reflects a diversity of articles and sources” (Google, 2017c). Our analyses focus on the German version of Google News. This seemed to be a reasonable choice, given that we used German IP addresses and media user typologies. That said, we expect that the results generalize to other countries, since Google does not give any reason to expect differences in the underlying algorithms as the “goal is to offer Google News to all of our users throughout the world” with the differences are that “[e]ach edition is specifically tailored with news for that audience” (Google, 2017b). As with comparable products and providers, we do not know which parameters drive

> personalized outcomes, since the algorithms underlying online news aggregators are “black boxes” (Pasquale, 2015). Therefore, we can only analyze the effects of personalization on news diversity based on input-output analyses, for example, by varying a user’s surf behavior or preferences (i.e., input) and comparing the resulting news offer (i.e., output). For this, we conducted two explorative studies to control for explicit (Study 1) and implicit (Study 2) personalization.

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