Influence of Trolls on Social Media Participation: Investigating a Social Movement

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Abstract

Trolls continue to play a significant role on social media. Despite being a common online social phenomenon, trolling rarely has been the focus of academic research in information systems. It is not sufficient to understand internet trolls in general but rather in specific organizational and social contexts. This research study examines how social media troll behavior will affect online participation in social movements. Scholarship in the domain of social media based mobilization and repression is also commencing, yet, the lacunae lie in the lack of emphasis on a solid theoretical grounding of the phenomenon.

Trolling can include behavior from provocative to disruptive and is fairly common on social media. Social trolls have received considerable attention in commercial media and in the public discourse yet have received minimal research attention. Current research on trolls is largely based in the computer science literature with a few information systems studies. These studies are largely focused on troll characteristics and troll detection by studying the meta-data or content and, in rare cases, the management of trolling behavior.

Our study examines the impact of trolling behavior on individuals’ participation online during social movements. We integrate social movement theory on individual recruitment, specifically the role of negative factors on social movements, with troll behavior research to develop our research model. Scholars have identified how negative factors have deterred growth of social movements while others have shown increase in protest activity in the long run. Nevertheless, repression mostly discourages participation in social movements by increasing the costs and risks for movement participants. The costs are both physical, such as beatings and arrests, as well as mental, such as polarization, intimidation and stigmatization.

We collected social media data on the Stand with Jawaharlal Nehru University (JNU) movement using Twitter's public application programming interface (API). We used relevant hashtags and Twitter handles to collect the data. We started with an initial sample size of 217,582 but after removing duplicates the dataset was reduced. In addition, we also collected the tweet author information for 45,760 users.

We annotated the tweets to indicate whether a message has troll characteristics by following a dictionary approach. We first generated a word frequency for all the tweets and, then, manually identified troll words. This was followed by searching our data sample for the tweets that mention troll words. We identified the tweets and, then, researchers independently analyzed the tweets and labelled them based on troll characteristics. The final number of troll tweets was 18,888. We transformed the data to identify the tweets that were posted in response to the troll tweet. We tested our model by analyzing the characteristics of troll tweets and the impact that a specific troll tweet had on twitter based participation in the social movement. The analysis of the post troll tweet discussion will allow us to empirically analyze the effect of troll messages on social media based participation in the social movement. We plan to share our preliminary results with researchers at AMCIS and would appreciate feedback at the conference.

1 All authors contributed equally to this research project, thus, listed in alphabetical order.