

The Role of Interpersonal Influence in the Management of Information Integrity within a Population

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Introduction

Information Integrity is defined as “reliable and accurate representations of information that are founded on ethical principles, and individual access to credible information.”¹ Understanding the processes responsible for maintaining information integrity of all kinds in public discourse is paramount in a democracy. Because political deliberation amongst the American public is in decline² the American public is losing its primary tool for vetting the integrity of information communicated to the population. Public deliberation allows for sources to be evaluated, claims fact checked, and arguments weighed. It is an essential component of any democracy.³ Consequently, there is a need for information integrity education to combat misinformation, the unintentional spread of false information, and disinformation, the spread of false information with the intent to deceive. From political to health news, media of all types has a consistent string of misinformation and disinformation being spread, often seamlessly intermixed with legitimate information.

According to Pew Research, over 50% of U.S. adults sometimes or often get their news from social media in 2023.⁴ The information presented on these platforms spreads easily and can quickly influence public opinion, in spite of the fact that the vast majority of American adults believe they can easily identify misinformation when presented to them. This is because the media only need to convince a small fraction of the general population in order to influence the majority audience. This idea is not new, however. Mediated messages influence a population primarily through interpersonal influence and this has received substantial recognition from scholars, most notably in the two-step flow hypothesis^{5,6} and Rogers’ diffusion of innovations.⁷ For example, the two-step flow hypothesis posits that mediated campaigns exert influence upon a small subgroup of opinion leaders that in turn exert influence upon the remainder in the social network. Thus, even the most outlandish misinformation claims can spread easily throughout a social network by way of the interpersonal connections amongst people in the network if a small group of opinion leaders within the network are initially duped. That is, because we trust others we know personally we believe what they tell us even if the same information originating from a mediated source would be readily dismissed as false or inaccurate.

This white paper elucidates a particular type of person who is capable of exerting considerable interpersonal influence on the remainder of a social network, opinion leaders. These types of people, through specific characteristics, traits, and relationships with their audience easily spread misinformation (or disinformation) through their social networks. However, they can also be used as a resource to help limit this spread at the same time. Regardless, it is key to understand how to identify them, how they are being used in campaigns, and how they can spread information.



What makes an opinion leader?

An opinion leader is someone who exerts considerable interpersonal influence on the decisions, behaviors, and thought processes of others within their social network. These people are most known for being used in political and health communication campaigns to encourage certain behaviors and actions, influencing communities the leaders are connected to, and encouraging interpersonal interaction. Researchers have found that a multidimensional model of the opinion leader known as a superdiffuser has particular importance for the management of information integrity in social networks.⁸ The superdiffuser is a well connected, persuasive, subject matter expert. These traits help the superdiffuser have greater argument diversity, cover more topics, and reach a broad interpersonal audience.

First let us consider the connectedness trait. Connectors are individuals who enjoy meeting new people, maintaining contact with others, providing a common link between groups, and forming bridges between diverse groups. That is, connectors often link otherwise disconnected groups. These relationships are considered weak-tie relationships, meaning there are low levels of intimacy between the connector and the members of these groups.⁸

Second, persuaders are skilled at argument and enjoy the ability to influence others, adapting their argument to who they are speaking to so they can best apply their influence and persuasion to the specific situation. “A persuader has the communicative skills necessary to influence others, frequently engages in attempts to influence others, is able to conceive and articulate positions from different perspectives, and does not shy away from controversial topics.”⁸ Many characteristics make up this trait including a high need for cognition, generating more valid arguments, a high internal level of control, being highly argumentative, and being effective at debate.

Lastly, mavens are perceived as experts in the field they are talking about. “People come to them for advice and they are also likely to bring information to people when they think it will be helpful.”⁹ Unlike the other traits of a superdiffuser, mavens can change over longer periods because being a maven is specific to having expertise in one topic area. With this, scales have been created to measure if an individual is a maven based on a positive association between the self-reports of discussion with their social network and the social network perception that the maven does have expertise.⁹

This model of the opinion leader importantly explains the interpersonal process involved when members of a social network discuss with each other persuasive messages they have been exposed to in the environment. Knowledge of these features of the opinion leadership process is incredibly important to both the persuasion theorist and practitioner as opinion leaders are those primarily responsible for controlling the message environment in a social network and therefore acting as effective gatekeepers of persuasive processes within the network.¹⁰ Interestingly, opinion leaders are somewhat rare; various estimates put their frequency at approximately 5% of the population of any given social network.^{8,11}

How can opinion leaders be used in campaigns?

Opinion leaders of all types but especially superdiffusers are valuable to campaigns whether used for benevolent or malevolent purposes. Campaigns seek influence and generate awareness of a particular subject; opinion leaders provide the perfect individual to further those two objectives. By targeting superdiffusers with their mediated messages, a campaign can increase reach and efficiency by relying on the superdiffuser to influence the majority of the social network. This is especially true if the campaign is disseminating a controversial message. The majority of the social network will trust a message coming from someone they know more likely than they will trust a mediated source. Additionally, it is much easier for the campaign to develop messages targeting unique attributes of the superdiffuser than many messages targeting a diverse network.

Because the superdiffuser has relationships with diverse groups that the campaign itself would not be able to reach otherwise they are a valuable tool for connection and spreading information. These individuals can pass new and additional information to different groups and then persuasively discuss it with them on an expert level. By leveraging the interpersonal trust inherent in the relationship between the superdiffuser and the other members of the network they are able to disseminate information more effectively than a traditional mass mediated campaign. This is essentially the basis for Katz two-step flow model of mediated social influence.⁵ Relying on effective persuasive message design targeting specific attributes of a subset of the population, the initial, or first step of the campaign utilizes mass mediated campaign messages to achieve broad reach but weak persuasive effects (in this case the subset being targeted are superdiffusers). In the second wave, or step, the campaign relies on the influenced superdiffusers to interpersonally influence the remainder of the population where there is limited reach but strong persuasive effects until this interpersonal influence spreads exponentially throughout the population.



Identification of Superdiffusers and Digital Trace Data

Understanding how to best identify opinion leaders in a social network is essential to leverage their interpersonal persuasive force in a practical persuasive communication. The superdiffuser model represents significant advancement in the identification of opinion leadership due to the nature of their extensive reach, recognized expertise, and persuasive abilities. Network analysis provides one possible solution.^{12,13} Network analysis is a technique used to map the pattern of relationships among actors in a group. By mapping the amount of communication between actors, network analysis can be used to identify possible opinion leaders by locating those with many communication links with others. Network analysis, however, is an expensive and time consuming method of identifying opinion leaders, particularly for large networks, because the methodology requires complex analyses to be carried out on a large number of observations to locate a small number of opinion leaders. Rogers⁷ reports two more efficient techniques to identify opinion leaders. The first method involves asking actors to report who the leaders of the network are and the second method involves asking actors to report if they are a leader in the network. The validity of both methods, however, rests upon the ability and willingness of the respondent to report their own group status and the group status of others. The accuracy of these reports, however, can be suspect.⁷

To address these limitations, Boster theorized⁸ individual differences could explain why the opinion leader is an efficient purveyor of interpersonal influence. This advancement is important for at least three reasons. First, if those responsible for diffusing the majority of information across a network are psychologically unique, the process of identifying them can be refined to a short psychographic inventory thus reducing the amount of resources necessary to locate them. Second, the same individual differences could be used to offer insight into the development of persuasive message strategies designed to influence people. Third, if these individual differences are motives for behavior, understanding them and the affiliated behaviors of the opinion leader can reveal ways to train people who do not have the traits to exhibit the behaviors.

Although there is currently ample published validity and reliability evidence for Boster et al.'s measures, they rely on the active participation of suspect superdiffusers to complete. This begs the question, what if one wished to identify malevolent superdiffusers spreading mis- or dis- information? They would be unlikely to participate. Thus, the next advancement in identifying superdiffusers involves translating the Boster self-report measures⁸ into measures of digital trace data. Digital trace data from social media platforms are one of the main spaces where access to large-scale social data are held. On platforms like X and Facebook, campaign teams can find superdiffusers by analyzing past use of the platforms by individuals through their digital footprint and correlating their usage data with the three superdiffuser traits in order to predict likely opinion leadership in any online network without ever interacting with the user. The history of individual activity on platforms surrounding discussion about a topic can be found, coded, and analyzed to identify superdiffusers within a crowd on social media.

Spreading (Mis)Information and Countermessaging

Because of the aforementioned attributes, superdiffusers are able to spread information of all types widely throughout a social network. On the one hand, this is advantageous for those wishing to disseminate accurate ethical information throughout a network. On the other hand, superdiffusers can easily be recruited, with or without their knowledge, to spread misinformation and disinformation. This is especially hard to address on social media platforms and even harder to reroute the cognitive processes and thought patterns within the minds of those who are reading the information. Campaigns therefore, must strategically develop messaging to counter misinformation and disinformation from being spread by controlling the message environment of the network.¹⁰ The message environment of any network consists of the universe of all messaging on a topic, mediated and interpersonal, within a social network. By controlling the message environment campaigns can reinforce the interpersonal influence of the superdiffuser in the case they are disseminating accurate and ethical information or attenuate the interpersonal influence of the superdiffuser in the case they are disseminating misinformation or disinformation.

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