A Practitioner’s Behavioral Approach: Reconceptualizing Whaley’s Word-of-Mouth Communication Model in an Online Context

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Abstract: The late American scholar Barton Whaley wrote several classic works related to disinformation, but people are likely less familiar with his limited works on word-of-mouth communication. Whaley published two studies in the early 1960s, separately exploring word-of-mouth communication among mainland Chinese civilians and mainland Chinese Communist military personnel. Whaley found that word-of-mouth communication by “key communicators” in these communities who were the most trusted and most informed was more effective than radio for information sharing, and likely the most effective method for disinformation. This paper will primarily explore Whaley’s model, but then introduce relevant literature on group dynamics and electronic word-of-mouth communication, which has largely focused on marketing practices and consumers. This paper proposes integrating Whaley’s model into these related behavioral frameworks, reconceptualizing a model of a practitioner’s behavioral approach to word-of-mouth online influence.

Keywords: Barton Whaley; Word-Of-Mouth; Electronic Word-Of-Mouth; Online Influence; Disinformation

1. Introduction

A surprising number of marketing studies on electronic word-of-mouth framed their concepts of how consumers respond to electronic word-of-mouth based on dual-processing mechanisms or heuristics.

Communication researchers throughout the past forty years have established relatively similar conditions for dual-processing systems, which is essentially our cognitive and attitudinal processing of content.

These dual-processing systems or conditions generally find that people spend more or less time thinking about and consuming or sharing content based on how relevant it is to them and how motivated they are to process that content.

This is important especially in this growing environment of “coordinated inauthentic behavior”, where creators may be scaling and applying more generative artificial intelligence content or more traditional manually created content with the same methods for attempting to influence audiences.

Graphika and the Stanford Internet Observatory in a summer 2022 report found what they characterized as the most extensive case of “covert pro-Western influence operations” in the past five years. Twitter (now X) and Meta the same summer removed clusters of presumably Western or American-controlled accounts for “platform manipulation and spam” and “coordinated inauthentic behavior”, including creating fake online personas with artificially generated faces. The report highlighted how ineffective many of these accounts appeared to be at generating engagement and building influence. While the report documented how these accounts created artful, foreign-language content and calls to action to encourage engagement and social media response, most of these accounts had no more than a handful of likes or retweets on Twitter, and less than a quarter of the accounts had more than a thousand followers.

The report noted another example of nearly half of these accounts posing as media organizations including batches of hashtags with their posted content, likely trying to reach broader audiences. But again, there was limited audience response.

Broad appeals to broad audiences even in the right language on the right platform do not often work.

In the author’s experience as a former profiler with the Federal Bureau of Investigation’s (FBI) Behavioral Analysis Unit (BAU), most practitioners gloss over a very liminal step in crafting online influence. Beyond narrowing down a target audience to an individual or group of individuals in some relationship, online influence to be potentially effective must include a behavioral objective that you want them to do.

The literature on electronic word-of-mouth is keenly focused on this step, as one of the most focal measures for marketers is the purchasing intent and purchases when exposed to electronic word-of-mouth posts.

Sartonen (2014) wrote about target audience analysis in the cyber domain approximately a decade ago, building upon a relatively established body of primarily military literature on target audience analysis. Sartonen characterized target audience analysis as closely related to marketing audience segmentation, where potential
target consumer audiences are segmented into possible profiles of potential consumers to create marketing content for those segments. He wrote that while marketing generally prefers larger consumer segments, psychological operations generally prefer more limited and defined audience segments.

Tatham (2015) wrote that while target audience analysis generally groups target audiences in terms of variables, such as audiences who may react positively to messaging or audiences who may be ambivalent to messaging, sometimes the target is just one person.

Tatham emphasized the need to find the “right” audience, but to be aware that those other audiences can influence others as well, even if the messaging or content was not intended for them. Tatham referred to Shakarian et al. (2013), who described prior research on social influence networks that suggested perhaps only the right person in a social network needs to be influenced to influence the majority.

Whaley’s studies in this paper do conceptually touch on these considerations, however, word-of-mouth communication is essentially a single channel or method of communication. Whaley is primarily interested in the social structure of the categories of people he interviewed and identified, as well as the relationships between those categories of people on various topics, like politics or sports.

There are certainly more recent studies of word-of-mouth communication among communities of interest, such as a December 2023 report funded by the U.S. Agency for International Development that examined the form of communications and content that influenced members of al-Shabaab to leave the terrorist organization. While this report did not call the family members and former members who were most influential “key communicators” like Whaley, they were nonetheless the most influential in restricted environments for communication and travel. Appeals to leave the group often happened over the telephone.

This report could have explored further the group dynamics in these communities, such as the norms among people in relationships in those communities whether those relationships were positive or deadly.

This paper will detail some of the group norms Whaley identified in his studies. For example, Chinese military personnel had to go to a local market daily for additional food because they were given such limited rations. There was a norm of enlisted Chinese military personnel that they could not have much access to news media, but because some of them had to go to the market each day, they had an opportunity to talk to merchants, who generally traveled freely and widely and had access to information the soldiers normally did not have.

2. Whaley’s Studies of Chinese Word-Of-Mouth Communication

Rasmussen wrote in the foreword to Whaley’s study that word-of-mouth communication is perhaps the most neglected means of transmitting information in psychological operations. He wrote that attempting to communicate any kind of information in this manner has an “unpredictable nature” because that information can be distorted or never reach the target. Rasmussen noted at that time that there was a growing body of research across several fields suggesting that there are regularities and patterns found in how people share information and ultimately how that information and people influence each other. Rasmussen suggested further that perhaps if we could understand these patterns, we may have greater confidence using informal communications in operational situations.

Whaley (1961) and his team interviewed nearly 300 Chinese soldiers who had been captured during the Korean War or fled mainland China throughout the 1950s. They explored the relationship between these soldiers and civilians in terms of the communities they came from.

Whaley designed this study as a guide for how to use word-of-mouth communication as a medium in operations, asking how these soldiers found out what was happening in other parts of China and from what source they obtained most of their information. Identifying the regularities and patterns he found in his interviews with these soldiers who originated from mainland Chinese communities, Whaley suggested that word-of-mouth communication with the right messengers could not only complement other mediums of communication in psychological operations, but perhaps replace conventional mass media.

Whaley noted in an early summary of his study that the conventional mass media in mainland China offer “very limited opportunities for exploitation” by psychological operations. But he found that Chinese civilians in fact appeared to be the “most promising channel of access” to Chinese soldiers despite attempts by military officials to limit contact. When soldiers visited local markets to buy goods because of the rudimentary military commissary, they had opportunity to talk informally with civilians in those markets. Conceptualizing the possibility of Chinese soldiers deploying to Southeast Asia where there are considerable diasporas of Chinese
emigres, Whaley suggested this kind of natural contact would also offer a “reasonable chance” or perhaps the best chance of utilizing word-of-mouth communication targeting concentrations of Chinese soldiers.

Whaley categorized Chinese enlisted soldiers and officers as essentially audiences, or segments of the Chinese military with somewhat different backgrounds and means. Whaley found that generally regardless of background or rank or whether soldiers were in a wartime or peacetime status, word-of-mouth communication was consistently the most important source of information and information sharing among soldiers. Most other mediums, including personal mail correspondence or telephone calls, were either closely monitored, or reserved for privileged civilian and military personalities and officials. Whaley also explored the kind of formal or organizational networks that intersect with informal channels, as people generally participate in both. For example, in a hierarchical military organization like the Chinese military, Whaley highlighted an “unusually marked reliance” on word-of-mouth communication throughout the formal command structure because of differing levels of literacy.

Whaley identified “companions” or small groups of friends, usually in the same military unit, where there were simple chains of ‘friend-of-a-friend-of-a-friend’ word-of-mouth sharing. Within the chain-of-command there were also senior military and political officers with official access to foreign media that the general military and public may not have had access to or that media or information was distorted or propagandized if it was shared further.

The remaining source of “fresh unofficial news” for Chinese soldiers were civilians:

...[civilians] compromise an extremely important channel of information for soldiers on garrison duty in China. Their importance derives from the fact that the extent and frequency of contact with civilians are probably sufficient to guarantee wide dispersion of that information they do convey to soldiers. Furthermore, the quality of the information which civilians transmit to soldiers is as high as, or higher than, that passed among soldiers. The high quality of this information derives from the fact that, compared with information from other soldiers, soldiers consider it to be unofficial, more credible, more important, more likely to be clandestine, and almost as recent. [emphasis added]

Whaley found that because of the limited supplies available to soldiers, enlisted men in nearly every unit were organized into small groups each day and sent to a local marketplace. The soldiers would buy extra meat and vegetables or cigarettes with money pooled from the unit. While the Chinese military attempted to strictly manage even these rotations, the soldiers who took turns visiting rural and urban markets routinely had contact with civilians like merchants. Civilian construction or agricultural projects would often involve soldiers assisting civilians, too. The study determined that generally as officers were promoted, they relied on radio and newspaper more than enlisted personnel for their sources of information because they had access and perhaps other background factors such as greater literacy.

Whaley the same year released another study that focused on civilians as “special audiences” for focusing word-of-mouth communication. Whaley and his team in 1959 interviewed over 2,000 Chinese refugees in Taiwan who had fled mainland China in the late 1950s to identify distinct audiences of civilians who were likely the most effective channels of informal communication. Whaley found that while information appeared to be shared most often among civilians from the same occupation or “social grouping”, however, he also identified a small portion of this population that he called “Key Communicators” because they appeared to be the most active sharing information by word-of-mouth whether among peers or outside their occupation. This category generally included merchants or manual workers, perhaps because they were more mobile and more frequently in contact with people outside their occupational groups. Whaley also highlighted teachers and physicians as examples because they are likewise more likely to be literate and involved in voluntary associations and interested in politics.

Like Whaley’s other similar study focused on Chinese military personnel, he found that these civilian “special audiences” also considered information shared by word-of-mouth to be more reliably or more trustworthy than information communicated by official news media. Citizens generally reported that these kinds of conversations often happened in peoples’ homes rather than public teahouses or markets, for example, because of a need for secrecy.

Whaley identified characterizations or demographics of these Key Communicators, such as the average level of education and gender and type of occupation. Whaley named two occupational groups as Key Communicators: “Merchants” and “Manual Workers”. Both occupational groups involve considerable travel and social contact. While Whaley pointed out that ideally, we should try to locate a Communicator who is himself a member of the
targeted occupational group or audience, these Key Communicators tend to have access to nearly all these civilian and military audiences in some manner.

This study also explored if there were relationships between the occupation of the “audience” and the type of information that civilian grouping would speak about most often. Whaley found for example that a group of “Soldiers-Officials-Policemen” and “Landlords-Professionals” were the most likely to talk about or share information on politics, while “Housewives” and “Fishermen” were the least likely to discuss politics. As another example, Whaley found that “Soldiers-Officials-Policemen” and “Landlords-Professionals” were the most likely to talk about or share information on politics, while “Housewives” and “Fishermen” were the least likely to discuss politics. As another example, Whaley found that “Students” and “Landlords-Professionals” were the least likely to talk about escape.

Whaley concluded in this study that we can “profitably” rely on a Key Communicator to communicate a targeted message and provide unique access to collect information.

Whaley’s **Key Communicators** table categorizes the occupation of the “informant” and what kind of information these occupations or roles in the 1950s and 1960s had the most or least access to.

<table>
<thead>
<tr>
<th>Information</th>
<th>Most</th>
<th>Least</th>
</tr>
</thead>
<tbody>
<tr>
<td>Politics</td>
<td>Soldiers-Officials; Policemen; Landlords-Professionals</td>
<td>Housewives; Fishermen</td>
</tr>
<tr>
<td>Economics</td>
<td>Merchants; Skilled Workers</td>
<td>Fishermen; Students</td>
</tr>
<tr>
<td>Military</td>
<td>Soldiers-Officials; Policemen; Manual Workers</td>
<td>Housewives; Peasants</td>
</tr>
<tr>
<td>Religion</td>
<td>Landlords-Professionals; Others</td>
<td>Skilled Workers; Manual Workers</td>
</tr>
<tr>
<td>Relatives</td>
<td>Housewives; Peasants</td>
<td>Soldiers-Officials; Policemen; Manual Workers</td>
</tr>
<tr>
<td>Gossip</td>
<td>Housewives; Students</td>
<td>Soldiers; Officials; Policemen; Others</td>
</tr>
<tr>
<td>Escape</td>
<td>Manual Workers; Fishermen</td>
<td>Students; Landlords-Professionals</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Manual Workers; Fishermen</td>
<td>Housewives; Students; Landlords-Professionals; Skilled Workers; Others</td>
</tr>
<tr>
<td>Others</td>
<td>Students; Fishermen</td>
<td>Skilled Workers; Housewives; Workers</td>
</tr>
</tbody>
</table>

Figure 1: Whaley’s table of Key Communicators among Chinese communities.

3. **Understanding the Relationships Behind Whaley’s “Social Groups”**

The “social groups” that Whaley characterized are ultimately not just taxonomical characterizations or constructs, but likely reflect relationships.

Forsyth (2014) defined a group as two or more people in some form of relationship. Considering the size of a group, those relationships can span dozens of people or just one other. The emphasis in most research on groups has been on social relationships, because people are generally interdependent and likely influence each other.

That influence can also be felt in the form of shared emotions or affect, generally known as identity-based emotions, because members of that group are responding emotionally to events or experiences (Campo, Mackie & Sanchez, 2019). The size of a group of people in a relationship influences the nature of that group in many ways, because of the unique characteristics of each member of that group who has some kind of relationship. Whether there is an organizational boundary to this group or not is less important than what kind of a relational boundary or boundaries there are between members of that group.

Forsyth characterized some of these structures for groups as norms and roles. Norms are consensual or understood expectations and behaviors among group members at a group level, so if someone leaves the group...
or joins the group these norms are usually constant. Roles describe some of these same expectations at a group level, but usually for labeled positions, such as director or teacher, for example.

Forsyth described the role of professor in a university and the norms among his department peers with whom he has different relationships or groups, and then the roles of husband and father when he was at home and trying to grade university papers. He noted that the group norms and roles are not always clear, and in some cases, people may not realize there was some expectation until a norm is violated.

While norms can also change over time (Nijstad and Van Knippenberg, 2008), the focus theory of normative conduct has suggested that norms appear to motivate behavior when they become “activated” or focal among group members. Forsyth emphasized that what we often see when we are trying to understand groups are in fact norms that are shared among group members.

Forsyth wrote that within a group structure there can also be a subgroup, formed when several members within a larger group place themselves for whatever reason at the intersection of a group’s “information-exchange patterns” and become more influential than individual members of the group or other groups within that larger group structure.

Forsyth wrote that we probably learn the most about a group studying the structure. Forsyth cautioned that we could misperceive the “groupiness” of a group we think we see based on four men walking down the street together who appear to be a group or something observable, such as similarity in dress or culture where we may consider people to be a group. He referred to Campbell (1958) who characterized how people and group members tend to rely on these kinds of cues to organize their perceptions of what appears to be a group as entitativity. Forsyth used an example of a vehicle. Someone may see four wheels and a trunk and a hood and a windshield and correctly see a vehicle rather than these individual parts of the car, but relational groups are much more complicated and changing.

Nijstad and Van Knippenberg (2008) also cautioned that members of their own perceived group can also make the same perceptions about the level of closeness in a group. Some of that process is an example of “shared socialness”, when people identify or join a group, they may also acknowledge that they display the same kind of characteristics of other members of that group or that acknowledged social norms represent the behaviors or features of a group that members should adopt especially to be distinct from others (Smith and Tindale, 2022). Harton et al. (2022) discussed other foundational phenomena of how people influence each other in groups, such as Latane’s (1996) cultural models of clustering, for example.

People’s attitudes and beliefs tend to consolidate and correlate in clusters or rather when they are interacting frequently and in a shared space over time. This interaction, however, is largely based on people in relationships.

Electronic word-of-mouth communication tends to be lumped in with multiple forms of communication online. Because the effect of electronic word-of-mouth is consistently influential, this channel can be misunderstood as a reflection of grouped individuals based on relationship.

4. The Limitations of Electronic Word-of-Mouth Influence Without Relationships

Rosario et al. (2020) wrote that much of the research on electronic word-of-mouth communication has been over-labeled and under-theorized.

Much of her criticism has been focused on the proliferation of conceptual labels as she called it among marketing practitioners. Rosario et al. grounded some of this conceptualizing by redefining electronic word-of-mouth communication as any form of consumer-generated information, emphasizing that this method is not a form of sharing general information.

The vast body of electronic word-of-mouth communication has focused on marketing practices, but with some additional consideration of how this communication influences feelings of trust.

Fang et al. (2018) proposed a digital advertising framework for electronic word-of-mouth information diffusion on online social networking platforms, that he suggested was driven largely by curiosity and influence. Fang referred to some of the prior research on electronic word-of-mouth adoption of marketed products, namely models or theories that focused on using “affect-as-information” and other pass-along behaviors. Fang was most interested in whether different types of curiosity would lead to exploratory browsing or specific searching, before interacting with content considered to be influential or influencers.
Fang et al. found that curiosity did not appear to significantly moderate the influence of content or electronic word-of-mouth adoption or pass-along behaviors, however, he did find that influential senders can positively moderate electronic word-of-mouth behaviors.

Likewise, Aprilia and Kusumawati (2021) found a positive correlation between electronic word-of-mouth content on visiting a destination and interest from other possible tourists, but their study also found a similar positive correlation between posting a photo of that destination and consumers’ responding interest.

Some electronic word-of-mouth communication research has explored how this form shapes consumer experiences before and after purchasing a product. Jalilvand et al. (2011) noted that many of these studies classify the effectiveness of electronic word-of-mouth among consumers at the individual level and the market level, meaning the accumulated customer opinion that might influence new customers. Cheung and Thadai (2010) took a broader look at literature on the effectiveness of electronic word-of-mouth, trying to conceptualize an analytical model for measuring the influence on electronic word-of-mouth communication to purchasing intention and purchasing of a good.

Zhang et al. (2010) found that Amazon changed the format of consumer reviews at that time, where consumers’ reviews were rated by other consumers based on how helpful the review was and that rated review was featured more prominently than other reviews based on recency, for example. This reference may be one of the clearer examples of how highly rated reviewers in a social marketing context can be seen as “key communicators” even if they are personally unknown to other consumers.

Generally, literature reviews characterized this field of studies as large and fragmented, overly concentrated on marketing practices rather than a clearer view of how the field has changed, in terms of measuring the impact of electronic word-of-mouth communication (Verma and Yadav, 2021; Huete-Alcocer, 2017). Researchers were increasingly finding that electronic word-of-mouth appeared to be instrumental to consumers reducing their perception of risk when making purchasing decisions about unfamiliar services or goods. Joshi et al. (2015) also found that consumers seem to trust electronic word-of-mouth communication the most when making decisions about products or services online.

Prahiawan et al. (2021) found in a review of several studies and their own on the effect of electronic word-of-mouth communication on concepts such as customer satisfaction and customer repurchase intention that electronic word-of-mouth communication did not have a significant impact on customer repurchase intention, and that there was not necessarily anything distinct about ‘E-satisfaction’ compared to customer satisfaction. Prahiawan et al. did however find again that electronic word-of-mouth communication had a positive effect on customer intention to purchase.

5. Discussion

Whaley’s model of word-of-mouth communication can be applied to any other culture or community. While Whaley was focusing on ethnic Chinese individuals and groups in the 1950s and 1960s who had fled or emigrated from mainland China, his methodology of ethnographic and cultural analysis applied to identified structures of communication surprisingly found that conventional media was not the best medium for disinformation among those communities, because people were not using radio much or did not have access.

While those limitations informed why his sample groups did not have access to some forms of media, the relationships he defined explained why people trusted some and did not trust others, and why some people depended on their sources of information from merchants rather than students, for example.

Both sections on group dynamics and electronic word-of-mouth communication may be surprising, given there are some popularly held opinions on what ‘groupthink’ is and how word-of-mouth influences people online. There are limitations to how electronic word-of-mouth influences behavior and how it should be measured. There are also limitations to what we know or do not know about the demonstration or expression of norms among people in relationship in a group, but observationally we can gather a sense of that structure for understanding how people in that group are communicating and who appears to have influence over others.

This paper proposes integrating contextually and culturally rich analysis, with the theoretical underpinnings found in group dynamics and the demonstrated marketing practices of electronic word-of-mouth communication.

This reconceptualized model offers a practitioner’s behavioral approach to identifying “key communicators” that could counter disinformation in target audiences, as well as “key communicators” who could influence.
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