The Mediated Knowledge Acquisition Model (MKAM):
Advancing Knowledge Gap theory in the Social Media Context

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Abstract

Social media provides a subversive media environment with an unprecedented high-level of the infusion of information within society. To guide informational communication among different groups of people, studying the impact social media have on knowledge acquisition inequity is necessary. The Knowledge Gap Theory (KGT), a classic communication theory, reveals that a knowledge growth inequity exists in society and is growing. This theory, however, cannot successfully be applied to a society in which social media exists. This is reflected in two aspects of the theory that have long been criticized by scholars. Firstly, it is based on the traditional source-receiver paradigm of communication (Dervin, 1980). This means it fails to apply to the social media environment in which the audiences are given multiple media choices and their interaction with new media involves consumption, participation and production whereas legacy/traditional media use entails consumption only. Through the interface of social media, users are able to rise above knowledge levels associated with their SES status. Secondly, with the assumption that segment populations in society by a top-down hierarchy (SES), the theory privileges western constructs of knowledge and success, thus not only discriminating against all others, but can hardly be applied to the current reality in which diverse social groups exist, and in which the boundary between elite knowledge non-elite knowledge is blurred. Although the problem is widely recognized, existing literature remain relatively silent about how to address this theory since the dawn and evolution of social media. This theoretical paper aims at filling this gap and modifying the KGT.

First of all, the KGT is reconceptualised as a gap in knowledge acquisition – the process of absorbing and storing new knowledge, to avoid narrowly defining knowledge from an elitist perspective. A Mediated Knowledge Acquisition Model (MKAM, see Figure 1) is proposed to illustrate how the knowledge gap grows with differential informational use of social media. This model integrates existing findings and puts forward four propositions based on Valkenburg and Peter's (2013) Differential Susceptibility to Media Effects Model. First, the three differential susceptibility variables, namely agreeableness (Mondak & Halerpin, 2008), new media literacy (Lee, Chen, Li, & Lin, 2015), and curated flow in social media (Thorson & Wells, 2016), affect informational social media use. These variables take both individual differences and variations of social media environment into consideration.

Each of these differential susceptibility variables impact informational use differently. Agreeableness refers to deference to other people (De Zuniga, Diehl, Huber, and Liu, 2017). De Zuniga et al. (2017) have observed that more agreeable individuals have a higher use of

social media for obtaining news. Since agreeableness implies the attribute of trust (de Zuniga et al., 2017), one could argue that high agreeable individuals have more trust in news than low agreeable individuals.

New media literacy is a convergence of all literacy including classic literacy, audiovisual literacy, digital literacy, and information literacy (Universitat Autònoma de Barcelona, 2007). Chen, Wu, and Wang (2011) propose a theoretical framework for new media literacy according to which a media literate individual is "a functional consumer and prosumer as well as a critical consumer and prosumer" (Chen, Wu, Wang, 2011, p. 86).

According to them, a critical understanding of media messages and their social, cultural, political and economic context defines new media literacy (2011). Therefore, new media literate individuals with access to social media would be more likely to use social media for obtaining information on the context surrounding media messages and thus more critically reflect on media messages.

Thorson and Wells (2016) have defined a framework of "curated flows," arguing that today's media environment requires a kind of engagement that involves "production, selection, filtering, annotation, or framing of content" (p. 310). According to them, "[t]o curate is to select and organize, to filter abundance into a collection of manageable size, one that in its smaller shape fulfils an informational or strategic need more efficiently than the buzzing flow of all available options" (p. 313). Curation, therefore, implies a more purposeful and organized way of seeking information. Given that a wide variety of content is available on social media, a purposeful information seeking requires all or at least some of the actions described by the curated flows framework.

Thorson and Wells (2016) outline the application of curated flows to five set of actors to whom the concept of curated flows are relevant. Among whom, we focus on 'personal curators' and 'social contacts.' Personal curators customize their information seeking experience to gratify their needs (Thorson and Wells, 2016). Moreover, individuals are increasingly aware of the impression they leave with the content they share with their social media contacts, hence an increasing tendency to tailor media content to the social needs of individuals (Thorson and Wells, 2016).

Secondly, Cacioppo and Petty's (1979) elaboration likelihood is used to define two possible cognitive response states (central or peripheral processing) which mediates the effect of informational social media on knowledge acquisition. Proposition 3 states that the differential susceptibility variables mentioned in proposition 1 also moderate the effect of informational social media use on knowledge acquisition. The fourth proposition states that

knowledge acquisition has a transactional effect on all the differential susceptibility variables, informational social media use, and elaboration likelihood. This proposition is the most striking part of the MKAM, as it explains why the knowledge acquisition gap is widening. People who have stronger abilities to acquire knowledge will benefit from the knowledge they have obtained, and thus continue to acquire more knowledge than people who have weaker knowledge acquisition abilities.

The MKAM makes several contributions to the advancement of the knowledge gap theory. Firstly, it is more contemporary and socially relevant compared to the initial knowledge gap hypothesis by adjusting it to also include social media. Secondly, this model explains the mechanism of mediated knowledge acquisition at individual level based on existing conceptual models and findings, while also including the mediating effect of response state, which is rarely studied in other literature on knowledge gap theory. Thirdly, to address the problem of elitist conceptualization, neither the differential susceptibility variables nor the dependent variable of knowledge acquisition is biased or privilege any constructs or epistemologies in MKAM.

This article consists of four parts. Part 1reviews existing literature of the initial knowledge gap hypothesis, its assumptions, and recent developments especially relevant to the digital age. Part 2 discusses the subversive features of social media and the limited generalizability of knowledge gap theory in the social media environment. The MKAM and its four propositions are explained in part 3. Existing theories and findings that theoretically/ empirically support this model are evaluated. Part 4 concludes with the implications of the model, as well as suggestions on how to empirically test the MKAM.
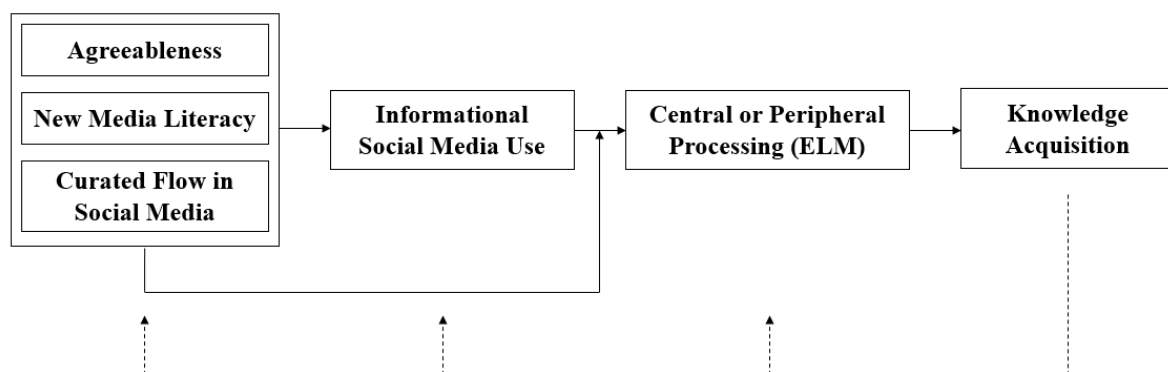
Figure 1. the Mediated Knowledge Acquisition Model (MKAM)

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