

Ideological Health Spirals: An Integrated Political and Health Communication Approach to COVID Interventions

DANNAGAL G. YOUNG
AMY BLEAKLEY
University of Delaware, USA

As evidence mounts regarding Americans' politically polarized responses to COVID-19, researchers need a comprehensive explanatory model to account for how and why political dynamics operate in the context of health behaviors. By conceptualizing interpersonal discussion and media selection behaviors as outcomes of identity-driven motivations shaped by political and psychological variables, the ideological health spirals model (IHSM) remedies a gap in current empirical analyses of COVID-related behaviors. The model explains how media fragmentation, political polarization, and social sorting reinforce communication discrepancies that create gaps in attitudinal, normative, and efficacy-related beliefs, which then inform health behaviors. This process is cyclical; the beliefs that result from this identity-motivated process support the same identity-driven motivations that again encourage interpersonal network and media selection behaviors. The hope is that health communication scholars and public health experts can use the IHSM to (a) identify the groups least likely to receive or act on the most beneficial health messages and (b) determine the most effective expert-informed regulations, recommendations, and communication strategies to disrupt dysfunctional spirals.

Keywords: COVID-19, political polarization, media fragmentation, health communication, social identity theory, reinforcing media spirals, reasoned action, theory of planned behavior

According to a recent report from the Pew Research Center (Van Green & Tyson, 2020), during the third week of March, 78% of Democrats reported believing that the coronavirus outbreak was a major threat to the health of the U.S. population as a whole, whereas only 52% of Republicans shared that view. Meanwhile, almost half of Democrats (48%) reported believing that people around the country were not taking the virus seriously, compared with only 31% of Republicans. Survey research by Jamieson and Albarracin (2020) indicates that exposure to broadcast television news was associated with accurate perceptions of risk, whereas exposure to conservative Fox News was associated with belief in COVID-related conspiracy theories. Meanwhile, economists from the University of Chicago sought to understand the effects of exposure to the COVID-dismissive programming on *Hannity* on the Fox News Channel compared with exposure to the COVID-warning programming on *Tucker Carlson Tonight* from the same network. Their data point to higher rates of COVID diagnoses and deaths in counties with greater viewership of *Hannity* compared with *Carlson* (Bursztyn, Rao, Roth, & Yanagizawa-Drott, 2020).

Copyright © 2020 (Dannagal G. Young, dgyoung@udel.edu, and Amy Bleakley, bleakley@udel.edu). Licensed under the Creative Commons Attribution Non-commercial No Derivatives (by-nc-nd). Available at <http://ijoc.org>.

While reports and analyses such as these point to a public health crisis that is highly politicized and fragmented, they do not necessarily offer a theoretical understanding of how and why health information in our fragmented and politically polarized context affects individual health beliefs and behaviors. The coronavirus crisis offers an opportunity to rethink models of communication related to public health. Especially in the United States, where the virus is being experienced within a politically polarized and socially sorted interpersonal and media communication environment (Iyengar, Sood, & Lelkes, 2012; Mason, 2018; Stroud, 2011), it is past time for scholars to recognize how the politicization of health crises has real-world consequences for health-related attitudes and, more important, health-related behaviors.

Limitations of Past Health Communication Frameworks

Given the complexities of our socially sorted and fragmented world, political communication scholars and health communication scholars are finding themselves called on to make sense of increasingly politicized health-related phenomena. But without the requisite background in health communication theory or political communication, many researchers are lacking the comprehensive understanding necessary to create effective explanatory and predictive models of politicized health attitudes and behaviors. According to Fowler and Gollust (2015), the politicization of health occurs "when political cues or symbols become integrated into the public presentation of the politicized health issue," which leads citizens to "interpret the politicized health issue heuristically through a particular political or ideological slant" (p. 157). As health and science become increasingly politicized in the United States, communication scholars have begun to address the nature and implications of this phenomenon, including how partisan message frames surrounding health and science shape news coverage as a result of journalism's bias toward drama and conflict (Gollust, Baum, Niederdeppe, Barry, & Fowler, 2017), and the effects of such messaging on public opinion toward health policy (Adida, Dionne, & Platas, 2018; Fowler, Baum, Barry, Niederdeppe, & Gollust, 2017) and on trust in doctors and the government (Fowler & Gollust, 2015).

The ideological health spirals model (IHSM) is a new explanatory model that encourages researchers to think holistically about the relationship between individual-level characteristics on the one hand, and political, media, and sociological context on the other, in shaping an individual's likelihood of engaging in discrete health-related behaviors. Whereas prior work has emphasized the role of elite cues and individual motivated reasoning in shaping public opinion of health policy and institutions (see Fowler & Gollust, 2015), the IHSM emphasizes how individuals' identity-based motivations interact with a fragmented media environment and socially sorted interpersonal context to create discrepancies in individuals' communication experiences that will inform their engagement in specific health behaviors (through their effects on behavioral, normative, and efficacy-related beliefs).

Two main theoretical frameworks serve as the underpinnings of the IHSM. The first is Tajfel and Turner's (1979, 1986) social identity theory, which is the foundation for two identity-based communication processes at the center of this explanatory mechanism: Slater's reinforcing spirals model (Slater, 2007, 2015), which offers an iterative account for how and why media selection behaviors serve to maintain and even polarize political identities, and Deaux and Martin's work (2003) on how interpersonal networks contribute to the development and maintenance of social identities. In IHSM, these two processes contribute to communication discrepancies that then shape attitudes, norms, and efficacy-related health beliefs. For the

second half of the IHSM, we integrate the framework of the reasoned action approach (Fishbein & Ajzen, 2011), one of the most enduring and predictive theoretical models of human behavior, which has informed the development of health communication campaigns for decades. Once synthesized, this model captures how social sorting and media fragmentation fuel identity-driven processes that maintain (and exacerbate) communication discrepancies, thereby creating gaps in health-related decision-making criteria and behaviors.

The IHSM enables researchers to:

1. Account for the fragmented political and media context in which prevention efforts and messaging around COVID-19 (and other politicized health crises) occur.
2. Conceptualize the interpersonal network and media selection behaviors that create health communication discrepancies as outcomes of identity-driven motivations.
3. Connect resulting communication discrepancies to attitudinal, normative, and efficacy-related beliefs that will contribute to one's intention to perform various health behaviors by embedding this process within a reasoned action approach.
4. Understand these processes as cyclical, because the same attitudinal, normative, and efficacy-related beliefs that result from this identity-motivated process support identity-driven motivations that will again contribute to interpersonal network and media selection behaviors, reinforcing this spiral.
5. Identify groups at highest risk for not receiving and/or acting on information pertaining to COVID-19 as a result of interpersonal networks, media selection, and communication discrepancies.
6. Determine the most effective expert-informed policy, recommendations, and communication strategies to disrupt dysfunctional spirals.

Political Polarization, Social Sorting, Media Fragmentation, and Political Psychology

Over the past 30 years in the United States, the ideological positioning of the average Democrat has become more liberal, while that of the average Republican has become more conservative (Pew Research Center, 2014). These political cleavages have been accompanied by social, cultural, and racial separations that have created socially sorted political parties (Mason, 2018) whose members have become internally homogeneous in ways that facilitate primal, emotional allegiances and responses. Such allegiances transcend the realm of public policy debate to create increased animosity toward the other side's members (Iyengar et al., 2012). This trend affects interpersonal relationships as well. As the racial, cultural, and geographic distinctions between parties grow—that is to say, as the social sorting of the parties increases—Americans are encouraged “to avoid social contact with members of the opposing parties” (Mason, 2018, p. 72).

This political and social sorting is facilitated by a fragmented media landscape where content is explicitly designed to segment people into distinct audiences. Advances in cable and digital technologies in

the 1980s and 1990s put an end to the “mass audience” as the proliferation of cable networks distributed American audiences across a vast programming landscape. Today, media executives deliberately create programming to separate people into small homogenous audiences to sell to advertisers. These divisions are based on demographics, psychographics, and even cultural and political characteristics (see Turow, 1997). Such audience segmentation is deepened through digital and social media algorithms that offer micro-targeted information and recommendations based on user behaviors and preferences (Settle, 2018). Although audiences for fragmented media content do show some overlap (see Webster & Ksiazek, 2012), the separation of politically, socially, and culturally distinct groups through these media logics is real (see Settle, 2018; Stroud, 2011).

The American media environment is replete with politically (and culturally) sorted information bubbles, and the way in which these outlets (e.g., MSNBC and Fox News) cover national issues varies in predictable ideological ways (Baum & Groeling, 2008; Stroud, 2011). Pew data indicate that trust in news sources varies by political ideology, with liberals less trusting of conservative outlets such as Fox, and quite trusting of moderate and liberal outlets. Meanwhile, Fox News is the most trusted source among conservatives, who show little to no trust in virtually every other outlet (Gramlich, 2020). Because attention is the commodity bought and sold through the economics of media, and emotions fuel attention, the economic model that sustains such programming reinforces these primal partisan divisions (Berry & Sobieraj, 2014). Because partisans are differentially trusting of partisan media outlets, and those outlets vary systematically in their coverage and framing of significant news stories, American audiences come away from their media experiences with vastly different understandings of the world, on everything from climate change (Feldman, Maibach, Roser-Renouf, & Leiserowitz, 2012), to the war in Iraq (Morris, 2005), to evaluations of political candidates (Hyun & Moon, 2016). One consequence of such affect-laden self-categorizations is “voters who are relatively unresponsive to changing information or real national problems” (Mason, 2018, p. 141).

While political communication scholars have found ways to integrate these fundamental changes in the media environment into theories of media effects on political attitudes, behaviors, and knowledge (Jamieson & Cappella, 2008; Slater, 2015; Stroud, 2011), the consequences of media fragmentation outside of political communication have been less considered. But today, given the vastly different coverage of the COVID-19 pandemic across partisan media outlets (see Farhi & Ellison, 2020; Jurkowitz & Mitchell, 2020; Motta, Stecula, & Farhart, 2020), there is ample reason to believe that attitudes, knowledge, and behaviors related to the coronavirus will not be randomly distributed across the population. Indeed, recent data from Pew Research Center indicate higher rates of false beliefs about coronavirus among Republicans, especially among Republicans who “got political news only from outlets whose audiences lean right politically” (Mitchell & Oliphant, 2020, para. 1).

Extensive work confirms that viewers display a strong preference for ideologically consonant outlets and information (Knobloch-Westerwick & Meng, 2009; Stroud, 2011). And while political partisans seek out like-minded political content through partisan news programming (Stroud, 2011), increasingly, evidence suggests that the psychological traits underlying political ideology shape preferences not just for certain content, but for programming aesthetics as well—hence fueling the divide of the informational experience of the left and the right (Young, 2019). Decades of research from political psychology point to important

psychological and physiological differences between liberals and conservatives that hinge on how we monitor our environments for—and engage with—threat (Jost, Glaser, Kruglanski, & Sulloway, 2003). These psychological traits contribute to liberals' and conservatives' preferences for vastly different genres of political information (Berry & Sobieraj, 2014; Young, 2019). The mediated information to which liberals and conservatives are exposed is therefore different, not only in content and attributions of responsibility and blame, but also in aesthetics, tone, and packaging.

Social Identity Theory, Reinforcing Media Spirals, and Interpersonal Communication Networks

As American political parties become polarized on policy issues and more socially sorted along dimensions of race, culture, religion, and geography, the symbolic meaning of one's party affiliation with regards to one's social identity becomes increasingly important. Perhaps this explains why Tajfel and Turner's (1979, 1986) social identity theory (SIT) has gained currency in political science over the last decade. According to SIT, individuals engage in self-categorization within various groups to which they belong. These perceived group memberships shape our social identities in ways that guide our interactions with other groups, other people, and the world around us. SIT proposes that these identities are malleable and able to be primed in certain contexts or in the face of certain information. Our social identities motivate us to engage in cognitive processes and behaviors that help us (a) feel like we are part of our in-group, (b) behave in accordance with the role we feel we should play within the group, and (c) increase our evaluation of our in-group, compared with our out-group (Stets & Burke, 2000). These three identity-reinforcing motivations are implicated in two communication-based theories that help account for media-related behaviors and choices related to the nature of our interpersonal social networks.

First, according to Slater's (2007, 2015) reinforcing spirals model, our media selection behaviors are rooted in our desire to maintain and reinforce our social identities. Especially under conditions of threats to our social identities, our high ego involvement encourages us to look for information that is consistent with who we are and what we believe. The result is that our media selection behaviors that are designed to satisfy these needs will tend to reinforce our preexisting attitudes and will make our social (and political) identities even more salient, thereby fueling an "iterative process"—hence, the "spiral." Slater also acknowledges that these processes are at play not only in our media experiences, but also in our organizational and interpersonal communication experiences. Although Slater's model does not necessarily predict an increase in polarization, he does acknowledge that certain highly ego-salient contexts might cause attitudes and identities to move to the extremes—a proposition confirmed by Stroud (2011), who found that "not only does partisan selective exposure feed polarized political attitudes, but there also is evidence for the opposite causal direction" (p. 136).

Second, Deaux and Martin (2003) have made use of SIT as well, using a social identity framework to account for how and why individuals make use of interpersonal networks. In their integrative model, they suggest that both social categories and interpersonal networks serve as contexts that inform social identities, which, they suggest "are enacted through the interpersonal networks of daily life" (p. 107). These social networks contribute to the core motivations described earlier; they contribute to one's feeling of in-group membership, help people know how to behave in accordance with the role they play in the group,

and increase one's self-worth compared with members of other groups. Just as Slater's reinforcing spirals model proposes that media-related behaviors are part of an iterative process that is self-sustaining over time, we posit that the same is true of interpersonal networks in the reinforcement of social identities. The attitudes and beliefs (and behaviors) that result from identity-driven interpersonal network behaviors will reinforce those same identity factors once again, hence feeding the spiral.

In sum, these theories conceptualize interpersonal network-related behaviors and media selection behaviors as being motivated by one's desire to reinforce one's social identity and increase one's sense of self-worth as part of one's social category. In the United States at present, we have (a) extensive social sorting within our political parties, (b) an abundance of fragmented partisan media outlets, and (c) media coverage and discussions of COVID-19 steeped in references to politics and political parties. Given this confluence of factors, we propose that motivations to maintain political-social identities will lead individuals to seek out political and social-identity-reinforcing media content and interpersonal discussion networks. These choices will have significant consequences for the amount and nature of COVID information that people receive and will affect COVID-related decision-making criteria, as explained through a reasoned action framework.

How Interpersonal and Media Spirals Shape Health Behavior: The Reasoned Action Approach

In the case of health communication crises such as COVID-19, these identity-driven communication spirals will reinforce information discrepancies in ways that will affect individual decision-making about COVID-19 prevention. When people have widely discrepant information about a health threat, its severity, and their individual-level susceptibility to it, this can have significant implications for those individuals' intention to engage in protective health behaviors. The reasoned action approach (RAA; Fishbein & Ajzen, 2011) offers a highly predictive model that accounts for how such information will translate into health-related behaviors. The RAA is a psychosocial model of behavior that synthesizes the theory of reasoned action (Fishbein & Ajzen, 1975), social-cognitive theory (Bandura, 1986), the health belief model (Becker et al., 1977; Janz & Becker, 1984), and the theory of planned behavior (Ajzen, 1991, 2011). The focus of the model is one's intention to perform a specific behavior (the "target behavior," in this case, social distancing or wearing a mask, for example) as both a dependent variable and a predictor of behavior. That is, the model is concerned with the factors influencing intention formation and with the relationship between intention and subsequent performance of the target behavior (Kim & Hunter, 1993).

The RAA assumes that behavior (e.g., whether or not one engages in social distancing practices or wears a mask in public) is primarily determined by intentions. This approach has been useful to health communication practitioners as they develop media messages related to target behaviors (Fishbein & Ajzen, 2011). Intention to perform a specific behavior is a function of one's favorableness or unfavorableness toward personally performing the behavior (i.e., attitudes), perceptions about what others think and do with regard to performing the behavior (i.e., perceived normative pressure), and beliefs about one's ability to perform the behavior, assuming that one wanted to do so (i.e., self-efficacy/perceived control). Each of these constructs is determined by a corresponding set of salient underlying beliefs. For example, attitudes are determined by one's beliefs that performing the behavior will lead to certain positive or negative consequences (i.e., outcome expectancies). For example, do individuals believe that their wearing a mask

at the grocery store will result in a reduction in COVID risk to themselves or people in their community? The more one believes that the behavior will lead to positive outcomes and prevent negative outcomes, the more favorable should be the attitude toward the behavior. Essentially, RAA-based health messages are designed to reinforce the belief mediators that are positively associated with intention and counterargue the belief mediators that are negatively associated with intention (Bleakley, Piotrowski, Hennessy, & Jordan, 2013; Hennessy, Bleakley, Mallya, & Romer, 2014; Jordan, Piotrowski, Bleakley, & Mallya, 2012; Massi, 2017). From this perspective, changing behavior requires affecting relevant beliefs and barriers. However, which beliefs and barriers are relevant with respect to each target behavior will vary by behavior and across groups and over time. In addition, which external or precursor variables (e.g., personality traits, health messages, demographics) are associated with the belief mediators is always an empirical question that varies by each specific behavior.

Although the RAA (Fishbein & Ajzen, 2011) offers a mechanism by which information can influence behavior (through attitudes, normative pressure, efficacy, and intention), it fails to address how and why (a) such discrepancies in individuals' communication experiences are created in the first place and (b) how behavioral beliefs and behaviors then reinforce the same communication patterns that maintain (or increase) those discrepancies. That is, RAA models of behavior do not consider the relationships among the precursor variables beyond their being correlated as exogenous variables. This is an important omission for questions that address information seeking and media exposure because, as we see in the case of COVID-19 (and other politicized health crises), the absence of a theoretical framework to account for how and why people encounter such health-related information in the first place limits the utility of RAA for public health experts looking to design public health information campaigns. By incorporating identity-driven motivations as the construct through which political/psychological traits shape information exposure via interpersonal networks and media-selection behaviors, IHSM explicates why and how people seek out and retain the information they do. Given that we have little reason to anticipate a reduction in political media fragmentation or social sorting anytime soon, integrating these political and identity-driven explanatory processes into our understanding of health-related behaviors is paramount.

Communication Discrepancies in the IHSM

As illustrated in Figure 1, individual differences in demographics and psychological and political traits interact to inform identity-related motivations that drive interpersonal and media communication behaviors. These include the composition and diversity of social networks, media selectivity behaviors (e.g., exposure and avoidance), media orientations, trust in media sources, and information processing goals. Because of the fragmented media environment, replete with ideological and partisan information sources, and the socially sorted interpersonal environment in which individuals interact with like-minded others, these interpersonal and media-related behaviors will result in vastly different health communication experiences in terms of individuals' access to relevant health information and the accuracy/framing of health-related information they receive. In the IHSM, the concept of communication discrepancies captures the empirical nature of the varying information environments that individuals construct for themselves through these identity-reinforcing media and interpersonal behaviors.

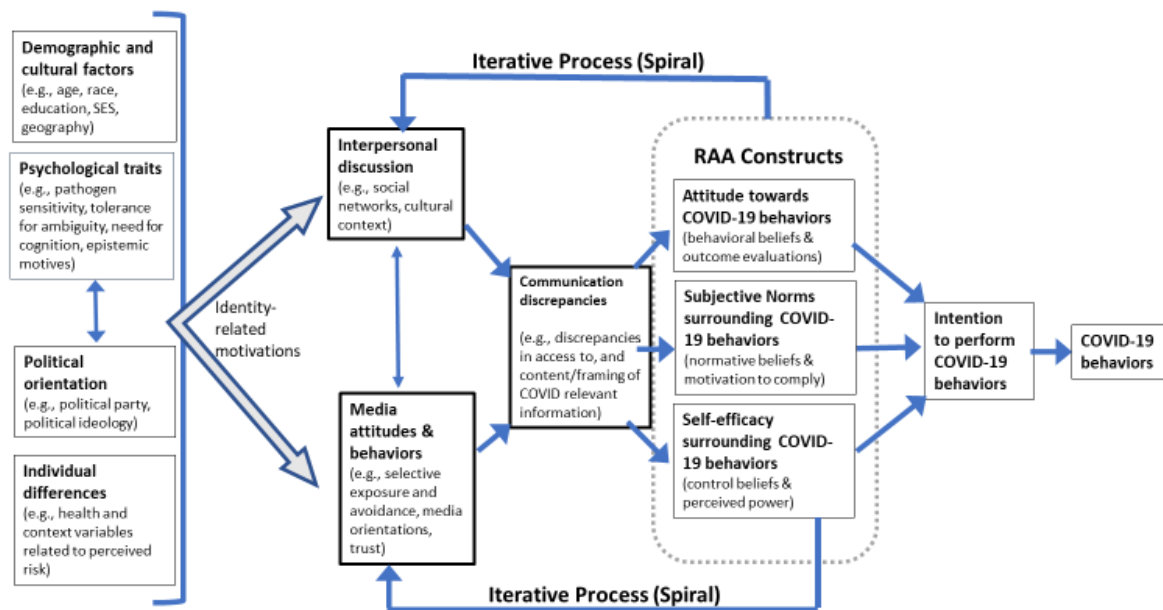


Figure 1. The ideological health spirals model. RAA = reasoned action approach.

Communication discrepancies in the IHSM are based on exposure to and engagement with health-relevant content of both media messages and interpersonal discussion networks (obtained through a formal content analysis of media and interpersonal discussion or simply through self-report). This (exposure \times content)-based construct captures the prevalence and nature of health-related information to which individuals are exposed, relative to others in the population. The “nature” of health-related information includes threat and efficacy frames, sources cues, references to experts, and attitudinal and normative information related to transmission, risk, prevention, and effects. The specific components of such communication discrepancies can vary depending on which frames, sources cues, and attitudinal, normative, and efficacy-related information are relevant to a given analysis. Communication discrepancies are operationalized for each individual relative to others in a given sample. The communication discrepancies score is thus measured as the number of standard deviations above or below the mean an individual’s (exposure \times content) score falls, hence allowing comparisons relative to others in the population. This operationalization offers practical advantages for public health experts wrestling with how to characterize the truth value of health-relevant information in a politicized context. By avoiding the concepts of “knowledge,” “accuracy,” and “misinformation,” the IHSM captures the existence of competing realities that are simultaneously constructed in the current information ecosystem. Whether these communication discrepancies are normatively healthy is ultimately determined not by whether they have more or less “truth value,” but instead by the effects they yield on individual behavioral choices.

While RAA does not discuss the origins of behavioral beliefs, outcome evaluations, subjective norms, or self-efficacy beliefs, the IHSM explains how communication discrepancies fueled by media fragmentation and political polarization will aggravate divides in these three main predictive constructs that drive behavioral intention—through resulting communication discrepancies. Consistent with the propositions of the reinforcing spirals model (Slater, 2007, 2015), the beliefs that result from these selection and sorting processes will tend to reinforce preexisting values, beliefs, and identities (especially political identities), contributing once again to the same identity-reinforcing behaviors from which those outcomes originated. Although Figures 1 and 2 indicate that all exogenous variables affect behavior only through identity-reinforcing media and interpersonal behaviors, this is merely to simplify the illustration with the intent of focusing on the mechanisms central to the IHSM. In practice, it is clearly possible, and even likely, that not all exogenous variables' effects on behavioral beliefs, norms, and efficacy are mediated through media and interpersonal communication and their resulting communication discrepancies, especially in the context of variables known to directly influence health beliefs (e.g., pathogen sensitivity, age, education).

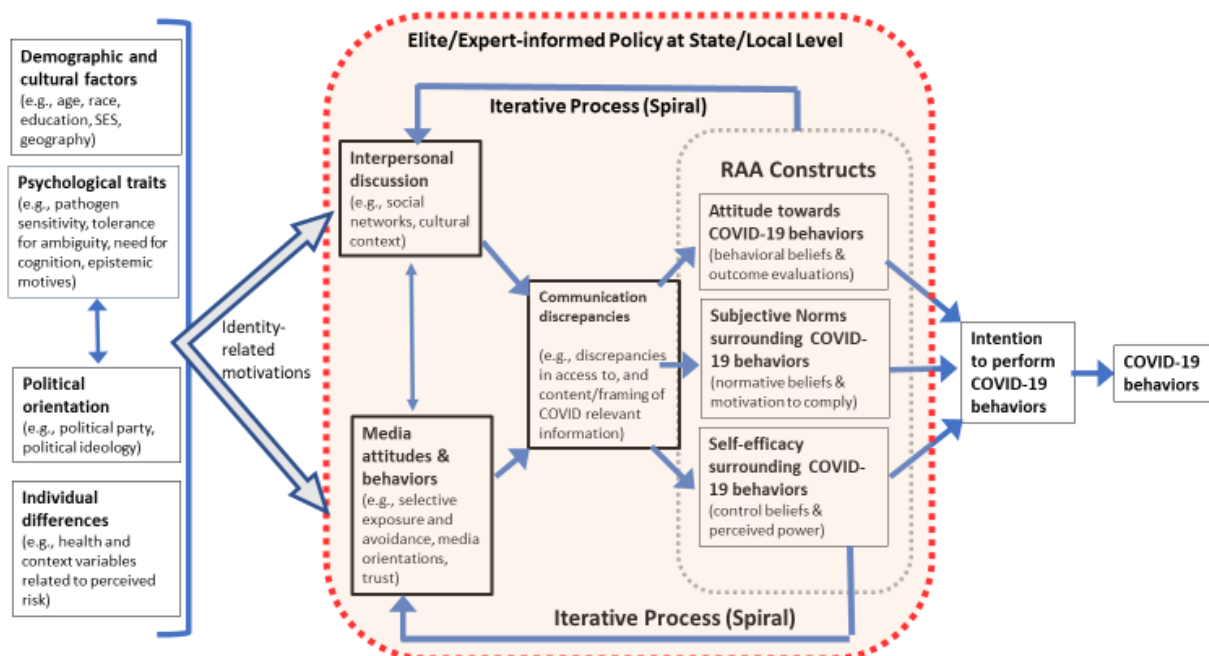


Figure 2. The role of expert-informed health policy in the IHSM. RAA = reasoned action approach.

By mapping the process through which individuals come to their COVID-19-related beliefs, subjective norms, and efficacy-related beliefs, the IHSM will allow journalists, practitioners, and public health officials to create messaging strategies that take advantage of the functional spirals while disrupting the dysfunctional ones.

Intervention and Disruption Through the IHSM

In addition to providing an explanatory mechanism to account for communication discrepancies that stem from a politically polarized, socially sorted, and fragmented information landscape, the IHSM also helps us think about opportunities for interventions that might disrupt dysfunctional health spirals. In the face of a public health crisis, as individuals experience increases in anxiety and stress, they are more likely to engage in information-seeking behaviors (Tausczik, Faasse, Pennebaker, & Petrie, 2012). As predicted by the IHSM, these information-seeking behaviors will be driven in part by a desire to reinforce social, political, and cultural identities. However, we also know that when people are anxious, their information-seeking motivations encourage them to be open to sources of information that they feel might mitigate either their anxiety or the threat itself. In the context of political information seeking, Valentino, Banks, Hutchings, and Davis (2009) found that "anxious citizens are more likely to seek balanced information when such information is useful for dealing with a threat or a problem" (p. 606). Indeed, studies by Albertson and Gadarian (2015) show that when individuals are anxious in response to health crises such as H1N1, they are more likely to trust information from health experts rather than information from public officials or other nonmedical representatives. Such interventions can reduce (or increase) communication discrepancies that shape COVID-related decision-making criteria (e.g., attitudes, social norms, and efficacy beliefs).

The IHSM as an Ecological Model

The framework offered by the IHSM illustrates how expert-informed health recommendations and policies (e.g., stay-at-home orders, business closures, mask mandates) at the state and local levels can interact with interpersonal discussion and media behaviors to affect health-related communication discrepancies. In this way, the IHSM offers an ecological approach to explaining the formation of communication discrepancies and their influence on health behavior in the context of policy environments characterized by elite/expert discourse. Ecological models incorporate environmental and structural influences on behavior, in addition to social and psychological factors found in most individual models of behavior change (Sallis, Owen, & Fisher, 2015). In public health and the social sciences, these models provide frameworks for demonstrating multiple levels of influence on behavior. Key to ecological models are the interaction of these levels for explaining and predicting behavior. Urie Bronfenbrenner's (1992) ecological systems theory, originally developed to organize the contexts involved in child development, often serves as an archetype of an ecological model, defining levels as micro, meso, exo, and macro. The levels start with influences from most proximal to the individual (i.e., micro) to most distal (i.e., macro); thus, interpersonal discussions and relationships represent micro-level factors, and policies are at the macro level. Typically, interventions based on ecological approaches emphasize that efforts at multiple levels will be more successful in changing behavior. The IHSM is consistent with this principle; elite/expert policy has the potential to disrupt media selectivity and reinforcement that results in discrepant information flows. Just as ecological approaches have been successfully applied in identifying environmental influences on the numerous health behaviors such as physical activity and smoking (Golden & Earp, 2012), the IHSM also places individual behavior in the context of larger social and political forces that shape behavior.

Assumptions and Testable Propositions of the IHSM

The following assumptions of the IHSM are theoretical statements that explain the mechanism proposed in the model:

1. Beliefs and behaviors related to COVID-19 prevention vary by demographic characteristics, psychological traits, political variables, and other individual differences.
2. Demographics, psychological, and political variables shape identity-related motivations related to media attitudes and selection behaviors, as well as interpersonal discussion network attitudes and selection behaviors.
3. Selective exposure to media content and selective engagement with interpersonal discussion networks interact with the content of those experiences to produce communication discrepancies.
4. These resulting communication discrepancies mediate the relationships among psychological, political, and demographic variables on the one hand, and health beliefs/behaviors on the other.
5. Media and interpersonal network behaviors reinforce communication discrepancies that shape COVID-19 decision-making criteria (attitudes, norms, and efficacy).
6. The resulting decision-making criteria subsequently reinforce the same identity-motivated interpersonal and media-related behaviors, creating an iterative process.
7. Public health policies at the state/city level interact with interpersonal communication and media attitudes and behaviors to differentially affect the formation of communication discrepancies.
8. Given (#7), public health policies at the state/city level will then affect health-related attitudes, subjective norms, and perceived behavioral control to shape behavioral intent (through their effects of communication discrepancies).

The following testable propositions of the IHSM are predictive hypotheses designed to be verified or falsified through empirical testing.

1. Psychological traits and political ideology predict exposure to identity-reinforcing media content and interpersonal discussion networks.
2. Exposure to identity-reinforcing media content and identity-reinforcing interpersonal networks interact with the content of those experiences to produce COVID-related communication discrepancies (differences in prevalence and nature of COVID-related information, frames, and sources cues to which individuals are exposed).
3. Communication discrepancies (operationalized as exposure to identity-reinforcing media and IP

networks × the content of those experiences) mediate the relationship between political/psychological traits and COVID-19 attitudes, subjective norms, and efficacy beliefs.

4. Attitudes, subjective norms, and self-efficacy related to COVID-19 predict intention to perform COVID-19 behaviors (e.g., wearing a mask, social distancing).
5. Intention to perform COVID-19 behaviors predicts whether an individual will engage in those behaviors (e.g., wearing a mask, social distancing).
6. State/city-level COVID-19 policy will reduce the strength of the effects of identity-reinforcing interpersonal and media behaviors on communication discrepancies, hence closing these identity-driven communication gaps.
7. Absence of state/city-level COVID policy will increase the strength of identity-reinforcing interpersonal and media behaviors on communication discrepancies, hence increasing these identity-driven communication gaps.

Conclusion

As evidence mounts regarding Americans' politically polarized responses to the COVID-19 threat, social scientists need a comprehensive explanatory theory-driven model that accounts for how and why these political dynamics operate in the context of health behaviors. The IHSM offers such an explanatory framework that integrates political and health communication theories to account for health-related behaviors in this politically fragmented and socially sorted world. By conceptualizing the interpersonal network and media selection behaviors as outcomes of identity-driven motivations shaped by political and psychological variables, the IHSM remedies a gap in current empirical analyses of COVID-related behaviors. The model explains how media fragmentation, political polarization, and social sorting reinforce communication discrepancies, producing gaps in attitudinal, normative, and efficacy-related beliefs that inform behavioral intention. This process is cyclical; the beliefs that result from this identity-motivated process support the same identity-driven motivations that again encourage interpersonal network and media selection behaviors. The hope is that health communication scholars and public health experts can use the IHSM to (a) identify the groups least likely to receive or act on health information that is most likely to lead them to practice recommended behaviors and (b) determine the most effective expert-informed policy, recommendations, and communication strategies to disrupt dysfunctional spirals.

References

- Adida, C. L., Dionne, K. Y., & Platas, M. R. (2018). Ebola, elections, and immigration: How politicizing an epidemic can shape public attitudes. *Politics, Groups, and Identities*, 1–27. doi:10.1080/21565503.2018.1484376
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychological Health*, 26(9), 1113–1127. doi:10.1080/08870446.2011.613995
- Albertson, B., & Gadarian, S. K. (2015). *Anxious politics: Democratic citizenship in a threatening world*. Cambridge, UK: Cambridge University Press.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Baum, M. A., & Groeling, T. (2008). New media and the polarization of American political discourse. *Political Communication*, 25, 345–365. doi:10.1080/10584600802426965
- Becker, M., Haefner, D., Kasl, S., Kirscht, J., Maiman, L., & Rosenstock, I. (1977). Selected psychosocial models and correlates of individual health-related behaviors. *Medical Care*, 15(5), 27–46. doi:10.1097/00005650-197705001-00005
- Berry, J. M., & Sobieraj, S. (2014). *The outrage industry: Political opinion media and the new incivility*. Oxford, UK: Oxford University Press.
- Bleakley, A., Piotrowski, J. T., Hennessy, M., & Jordan, A. (2013). Predictors of parents' intention to limit children's television viewing. *Journal of Public Health*, 35(4), 525–532. doi:10.1093/pubmed/fds104
- Bronfenbrenner, U. (1992). *Ecological systems theory*. London, UK: Jessica Kingsley.
- Bursztyn, L., Rao, A., Roth, C., & Yanagizawa-Drott, D. (2020). *Misinformation during a pandemic* (Working Paper No. 2020-44). Chicago, IL: Becker Friedman Institute. Retrieved from https://bfi.uchicago.edu/wp-content/uploads/BFI_WP_202044.pdf
- Deaux, K., & Martin, D. (2003). Interpersonal networks and social categories: Specifying levels of context in identity processes. *Social Psychology Quarterly*, 66(2), 101–117. doi:10.2307/1519842
- Farhi, P., & Ellison, S. (2020, March 24). The Fox News whipsaw on coronavirus: In another swerve, hosts push Trump to abandon shutdown. *The Washington Post*. Retrieved from

https://www.washingtonpost.com/lifestyle/media/the-fox-news-whipsaw-on-coronavirus-in-another-swerve-hosts-push-trump-to-abandon-shutdown/2020/03/24/b684cbce-6dee-11ea-aa80-c2470c6b2034_story.html

Feldman, L., Maibach, E. W., Roser-Renouf, C., & Leiserowitz, A. (2012). Climate on cable: The nature and impact of global warming coverage on Fox News, CNN, and MSNBC. *The International Journal of Press/Politics*, 17(1), 3–31. doi:10.1177/1940161211425410

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*. Abingdon, UK: Taylor & Francis.

Fowler, E. F., Baum, L. M., Barry, C. L., Niederdeppe, J., & Gollust, S. E. (2017). Media messages and perceptions of the Affordable Care Act during the early phase of implementation. *Journal of Health Politics, Policy and Law*, 42(1), 167–195. doi:10.1215/03616878-3702806

Fowler, E. F., & Gollust, S. E. (2015). The content and effect of politicized health controversies. *The Annals of the American Academy of Political and Social Science*, 658(1), 155–171. doi:10.1177/0002716214555505

Golden, S. D., & Earp, J. A. L. (2012). Social ecological approaches to individuals and their contexts: Twenty years of health education & behavior health promotion interventions. *Health Education & Behavior*, 39(3), 364–372. doi:10.1177/1090198111418634

Gollust, S. E., Baum, L. M., Niederdeppe, J., Barry, C. L., & Fowler, E. F. (2017). Local television news coverage of the Affordable Care Act: Emphasizing politics over consumer information. *American Journal of Public Health*, 107(5), 687–693. doi:10.2105/AJPH.2017.303659

Gramlich, J. (2020, January 24). *Q & A: How Pew Research Center evaluated Americans' trust in 30 news sources*. Retrieved from <https://www.pewresearch.org/fact-tank/2020/01/24/qa-how-pew-research-center-evaluated-americans-trust-in-30-news-sources/>

Hennessy, M., Bleakley, A., Mallya, G., & Romer, D. (2014). Beliefs associated with intention to ban smoking in households with smokers. *Nicotine Tobacco Research*, 16(1), 69–67. doi:10.1093/ntr/ntt119

Hyun, K. D., & Moon, S. J. (2016). Agenda setting in the partisan TV news context: Attribute agenda setting and polarized evaluation of presidential candidates among viewers of NBC, CNN, and Fox News. *Journalism & Mass Communication Quarterly*, 93(3), 509–529. doi:10.1177/1077699016628820

- Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology: A social identity perspective on polarization. *Public Opinion Quarterly*, 76(3), 405–431. doi:10.1093/poq/nfs038
- Jamieson, K. H., & Albarracín, D. (2020, April 20). *The relation between media consumption and misinformation at the outset of the SARS-CoV-2 pandemic in the U.S.* Retrieved from <https://misinforeview.hks.harvard.edu/article/the-relation-between-media-consumption-and-misinformation-at-the-outset-of-the-sars-cov-2-pandemic-in-the-us/>
- Jamieson, K. H., & Cappella, J. N. (2008). *Echo chamber: Rush Limbaugh and the conservative media establishment*. Oxford, UK: Oxford University Press.
- Janz, N. K., & Becker, M. H. (1984). The health belief model: A decade later. *Health Education Quarterly*, 11(1), 1–47. doi:10.1177/109019818401100101
- Jordan, A., Piotrowski, J. T., Bleakley, A., & Mallya, G. (2012). Developing media interventions to reduce household sugar-sweetened beverage consumption. *The Annals of the American Academy of Political and Social Science*, 640(1), 118–135. doi:10.1177/0002716211425656
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3), 339–375. doi:10.1037/0033-2909.129.3.339
- Jurkowitz, M., & Mitchell, A. (2020, April 1). *Cable TV and COVID-19: How Americans perceive the outbreak and view media coverage differ by main news source*. Retrieved from <https://www.journalism.org/2020/04/01/cable-tv-and-covid-19-how-americans-perceive-the-outbreak-and-view-media-coverage-differ-by-main-news-source/>
- Kim, M. S., & Hunter, J. (1993). Relationships among attitudes, behavioral intentions, and behavior. *Communication Research*, 20(2), 331–364. doi:10.1177/009365093020003001
- Knobloch-Westerwick, S., & Meng, J. (2009). Looking the other way: Selective exposure to attitude-consistent and counterattitudinal political information. *Communication Research*, 36, 426–448. doi:10.1177/0093650209333030
- Mason, L. (2018). *Uncivil agreement: How politics became our identity*. Chicago, IL: University of Chicago Press.
- Massi, L. (2017). The influence of persuasive messages on healthy eating habits: A test of the theory of reasoned action when attitudes and subjective norms are targeted for change. *Journal of Applied Biobehavioral Research*, 22(4), e12106. doi:10.1111/jabr.12106
- Mitchell, A., & Oliphant, J. B. (2020, March 18). *Americans immersed in COVID-19 news; Most think media are doing fairly well covering it*. Retrieved from

<https://www.journalism.org/2020/03/18/americans-immersed-in-covid-19-news-most-think-media-are-doing-fairly-well-covering-it/>

- Morris, J. S. (2005). The Fox News factor. *Harvard International Journal of Press/Politics*, 10(3), 56–79. doi:10.1177/1081180X05279264
- Motta, M., Stecula, D., & Farhart, C. (2020). How right-leaning media coverage of COVID-19 facilitated the spread of misinformation in the early stages of the pandemic in the U.S. *Canadian Journal of Political Science/Revue*, 1–9. doi:10.1017/S0008423920000396
- Pew Research Center. (2014). *Political polarization and media habits*. Retrieved from <http://www.journalism.org/2014/10/21/political-polarization-media-habits/>
- Sallis, J. F., Owen, N., & Fisher, E. B. (2015). Ecological models of health behavior In K. Glanz, B. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (pp. 43–64). San Francisco, CA: Jossey-Bass.
- Settle, J. E. (2018). *Frenemies: How social media polarizes America*. Cambridge, UK: Cambridge University Press.
- Slater, M. D. (2007). Reinforcing spirals: The mutual influence of media selectivity and media effects and their impact on individual behavior and social identity. *Communication Theory*, 17(3), 281–303. doi:10.1111/j.1468-2885.2007.00296.x
- Slater, M. D. (2015). Reinforcing spirals model: Conceptualizing the relationship between media content exposure and the development and maintenance of attitudes. *Media Psychology*, 18(3), 370–395. doi:10.1080/15213269.2014.897236
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 63(3), 224–237. doi:10.2307/2695870
- Stroud, N. J. (2011). *Niche news: The politics of news choice*. Oxford, UK: Oxford University Press.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago, IL: Nelson-Hall.
- Tausczik, Y., Faasse, K., Pennebaker, J. W., & Petrie, K. J. (2012). Public anxiety and information seeking following the H1N1 outbreak: Blogs, newspaper articles, and Wikipedia visits. *Health Communication*, 27(2), 179–185. doi:10.1080/10410236.2011.571759

Turow, J. (1997). *Breaking up America: Advertisers and the new media world*. Chicago, IL: University of Chicago Press.

Valentino, N. A., Banks, A. J., Hutchings, V. L., & Davis, A. K. (2009). Selective exposure in the Internet age: The interaction between anxiety and information utility. *Political Psychology, 30*(4), 591–613. doi:10.1111/j.1467-9221.2009.00716.x

Van Green, T., & Tyson, A. (2020, April 2). *5 facts about partisan reactions to COVID-19 in the U.S.* Retrieved from <https://www.pewresearch.org/fact-tank/2020/04/02/5-facts-about-partisan-reactions-to-covid-19-in-the-u-s/>

Webster, J. G., & Ksiazek, T. B. (2012). The dynamics of audience fragmentation: Public attention in an age of digital media. *Journal of Communication, 62*, 39–56. doi:10.1111/j.1460-2466.2011.01616.x

Young, D. G. (2019). *Irony and outrage: The polarized landscape of rage, fear, and laughter in the United States*. New York, NY: Oxford University Press.