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The Extraordinary Influence of Ordinary People

When it comes to selling products or winning political elections, researchers have usually argued that opinion leaders—often called "influentials" because of their social networks—play a stronger role than ordinary people on the street.

That conventional wisdom may have to change, according to two sociologists, who have used advanced computer models of social influence to show that common folks who are "easily influenced" simply influence each other in unpredictable ways.

Under most conditions, "large cascades of influence are driven not by influentials, but by a critical mass of easily influenced individuals," write Duncan J. Watts of Columbia University and Sheridan Dodds of the University of Vermont in the December issue of the Journal of Consumer Research.

Their findings challenge a decades-old theory used in marketing and politics. That theory said that if you target "influentials"—well-connected and informed people who powerfully influence their immediate environments—they will set the direction of social trends, from political behavior to buying particular products.

The old theory also allowed society to say that someone must have been "behind" a cultural fad, a marketing success, or a drop in crime. "It is tempting to trace the phenomenon to the individuals who 'started it,' and conclude that their actions or behavior 'caused' the events that subsequently took place," the authors said.

But the fad or trend could have been purely by chance from the choices of ordinary people.

In the study, Watts and Dodds explain that although "influentials" may number in the millions, they are generally unseen: They are not like movie stars, pundits, CEOs, or Oprah Winfrey—who can pick a book title and make it a best seller. But despite the powerful social networks of influentials, they "are less important than is generally supposed, either as initiators of large cascades, or as early adopters" of a particular behavior or viewpoint.

The study is just the latest application of more advanced computer models of predicting how an individual makes decisions, much as pieces on a chessboard are influenced by other pieces and moves. In one classic model, developed in 1971, Thomas C. Schelling, showed that small preferences for the race of neighbors, for example, eventually leads to a "cascade" of total segregation.

That model has recently been adapted by sociologist William Bainbridge of the National Science Foundation to show how, in a society of many religions, American choices have

shaped religious neighborhoods and regions of the United States in ways that have become permanent, despite increased mobility of citizens.

In this new study, Watts and Dodds tested the conventional theory of "influentials," called by one proponent "one of the most important formulations in the behavioral sciences." Business and political strategists have used it on the assumption that "a small group of influential opinion leaders may accelerate or block the adoption of a product."

The Watts and Dodds study assumes that the choices of each individual in a society influence those around them in a random way, and thus the computer can run such chains of influence. Depending on the social network, influence can stay local or have a "global" spread. "Global cascades ... affect many individuals, propagate for many steps, and are ultimately constrained only by the size of the population through which they pass." Therefore, even a small group at the right time can reach a "critical mass" and prompt a wide and rapid chain of events.

The spread of influence is extremely difficult to study by social scientists, and thus the turn to mathematical models or "game theory." But the authors offered a parallel in nature: A large forest fire can start from an ordinary spark if the circumstances—dryness, wind, and density—are right. "Just as for large cascades in social influence networks, when the right global combination of conditions exists, any spark will do; when it does not, none will suffice," the authors said.

Their theory also finds a parallel, they said, in the study of "information cascades." In these cases, a small, random change in information at a key time can lock larger groups into a collective choice beyond anyone's control.

The authors said that society tends to look for major players who make things happen. "Just because the outcome is striking, however, does not on its own imply that there is anything correspondingly special about the characteristics of the individuals involved," they said.