What is complex contagion, and how it’s different from simple  
Contagion (you may want to refer to readings – Centola)

Simple contagion assumes an infection will spread to all connected nodes over time. An infection is not necessarily a disease or a negative in this context, it may be characterized as information, a type of activity or a disease. In simple infections, an infection is acquired if a node has an edge connecting to an infected node. In a network of people, if one person is infected all their connections will be infected at the next time interval.

On the other hand, complex contagion assumes a threshold number of infected connected nodes is required for infection. In other words, in a network of people, there may be a requirement for over 25% of their network to become affected. So, a person with 4 connections will only become infected once at least 2 of their connections are infected. Complex contagion, therefore, requires many nodes surrounding uninfected nodes to spread infections. This indicates that networks need the right connections between nodes that surpass the threshold for all nodes at time tn.

tokenism

– What does complex contagion mean for diffusion of behaviors in the organization

The diffusion of behaviours in organizations following complex contagion models means two primary things. First, in order for a new behaviour to spread through an organization, the network in place needs to be sufficiently connected. There must be sufficient intragroup and intergroup connections throughout the network. The image below shows an example of insular networks that have high intragroup connections and networks that have. Both inter and intragroup connections are required for complex infections to spread.

The second requirement for complex infection of behaviour across an organization is that the network is not too dense. If the network contains too many connections, then the infections will not spread evenly throughout the network and will eventually be blocked presumably by nodes or groups who have very high internetwork connectivity.

that in order to adopt new behaviors, the behavior needs to spread in such a way that it builds strength and work through the organization network. at the periphery of the network before many people need to adopt the change

– How can we use the threshold models to better manage  
• Prosocial behavior in organizations  
• Learning  
• Toxic or unproductive behaviors