The Effects of Embeddedness in Online Social Networks for Patients of Chronic Diseases

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The goal of this project is to better understand the effects of increased embeddedness among patients in chronic illness populations who participate in online social networks. We present an experimental community building platform (YouMeIBD). Initially targeted at patients of inflammatory bowel disease (IBD), the platform can be extended to other chronic disease groups. Our hypothesis is that facilitating connections among patients through homophily will result in greater embeddedness, which will increase a sense of social support and self-efficacy, and ultimately improve outcomes like the individual wellbeing of patients. In the paper, we will present the detailed study design of an experiment to test the hypotheses.

Our initial research shows that Facebook users who comment on IBD-related discussion boards do not necessarily friend one another, while posters on interest-based discussion boards often become friends. Therefore, we argue that allowing IBD patients to discover their shared interests will trigger friendship requests based on homophily, and will hence increase the embeddedness in the IBD patient community. Accordingly, the core of our platform is a recommendation system, which uses personal and structural attributes of patient users to suggest to them like-minded patients with similar backgrounds and symptoms. Moreover, YouMeIBD extends Facebook and is thus able to include attributes and networks of its users' Facebook profiles in the recommendation algorithm. In addition, users can take a game-like quiz where they can answer matchmaking questions defined by other users and create their own questions.

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