Examining How Chronically Ill Patients’ Reactions To, and Effective Use of, Information Technology Can Influence How Well They Self-Manage Their Illness

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Abstract

While chronically ill patients can significantly benefit from self-management (SM) information systems, they are also unlikely to perceive, use, and benefit from them in the same way, and past research has observed that many patients tend to not use such systems effectively. A key premise of the present study is that attributing the cause of one’s success or failure in self-managing one’s chronic disease to SM information systems is likely to influence how patients react to such systems, which in turn is likely to influence their usage behaviors and SM performance. Building upon attribution theory and learned helplessness theory, this paper examines how patients’ causal attributions of their success or failure in self-managing their chronic illness tends to influence the way they cognitively perceive, emotionally react to, and use an IT-based SM system. It also examines what constituted effective use in the SM context that was studied and how patients’ effective use of an IT-based SM system tended to influence their SM performance. Based on data collected from patients who were using a web-based asthma SM portal, the paper identifies three SM attributional styles and three patient views of SM information systems that help explain how chronically ill patients tend to interact with such systems, as well as its consequences, and discusses the implications of its findings for research and practice.

Keywords: Chronic disease self-management, effective use, attribution styles, IT-based self-management systems, attribution theory, learned helplessness theory, mixed-method research