ABSTRACT

**Title of Dissertation:    The impact of an online community on its members: Group dynamics, sociability, and usability**

**Diane Maloney-Krichmar, Doctor of Philosophy, 2003**

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The purpose of this study is to increase understanding about online communities and to inform the work of online community developers and health care professionals as they seek to establish more effective ways of meeting the needs of individuals with health concerns.  The goals of the study are: to understand the role of the online community in the lives of its members; to gain an in-depth knowledge of the culture of the community; to identify the dynamics of social interaction in the community; and, to inform the software design, development, and management of online health communities.

The study is based upon the theories of sociability and usability, from human-computer interaction; social network analysis, from sociology; and, group membership roles and Interaction Process Analysis, from social psychology.  It takes a broad fieldwork approach, guided by the ethnographic research techniques of observation, interviewing, and archival research.  The researcher observed an online health community for two and one-half years; evaluated the community using sociability and usability heuristics; conducted social network analysis; group dynamics analysis using Benne and Sheats' (1948) group membership roles and Bales' (1951, 1958) Interaction Process Analysis; and, interviewed 20 members of the community.

The results of the study show:

- The importance of a narrow focus in establishing common ground, group cohesion, reciprocal behavior, and successful social interaction;

- The asynchronous, textual environment provides stability and continuity, and allows members to tightly control presentation of their identity and social interaction;

- The diversity of members, information, and experiences are major sources of social capital;

- The group dynamic patterns in this self-help online community are similar to those found in face-to-face groups;

- The support of sociability is important in the success of an online community. It demonstrates that, even though the online community did not meet sociability guidelines, the purpose, governance policies, and norms of the community are embedded in the bulletin board.

- The position of the bulletin board as the main feature of the home page of the Kneeboard plays a key role in community dynamics and sends the message that exchanges between members are the most important resource on the site.

- The members value reliable technology over state-of-the-art technology. The major usability finding is that basic bulletin board and web-based technology can successfully support an online community as long as it is reliable.