Content Analysis Of Self-Help Internet Discussion Boards:  What They Do, What They Don’t Do

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Abstract

The quantity and quality of medical information available on line has been a subject of intense scrutiny since the inception of the internet. The internet affords multiple channels and venues for health-care consumers to seek out and share information. One of the more popular venues for this information exchange is through internet bulletin boards. Bulletin boards allow users to post comments or questions and have other members of the group respond. The obvious advantage of sure a medium is that it allows users from all over the nation, and in fact all over the world, to come together and discuss their health issues. In a sense, it could be termed a virtual form of group therapy. One possible pitfall of these groups is that they may not cover the range of information that traditional therapy groups explore. The purpose of the current investigation was a content analysis of a group of randomly chosen self-help bulletin boards to assess if these self-guided discussions cover the breadth of discussion topics that would be covered in a more traditional, professionally guided group setting. It was found that the comments did not evenly distribute among the traditional group therapy categories and tended to cluster in the giving and seeking advice category.
Self-Help Advantages and Disadvantages
Ellis (1993) argued that while many self-help materials are “unscientific and shoddy” (p. 335), some have several concrete advantages that may help many people in substantial ways - sometimes even more than professional therapy. One advantage is that some people are naturally readers and may learn more by reading than by having one-on-one interaction with a therapist or a group. Additionally, having the material in a written form allows a person to re-read the material until they feel they have really grasped the information. Individuals who do not enjoy reading have been found to receive the same benefits from listening to the material on audio or videocassettes.

Ellis (1993) identified one group of people who particularly benefited from self-help literature: those who will not or cannot go to a professional therapist. While going to therapy may be the best option, using self-help material is more advantageous than seeking no help at all. The same applies to individuals who cannot afford therapy, who are embarrassed to go to therapy, or who live in isolated areas with limited or no access to professional help and individuals who may have tried therapy before and been turned off for one reason or another.

Self-help has been found to be particularly helpful when combined with traditional therapy. Halliday (1991) found that self-help books were frequently read and that the majority of people reported benefit from reading these books. They reported benefits such as; a positive attitude, general self-understanding, the importance of communication, relaxation techniques.

In a meta-analysis, McDermut, Miller and Brown (2001), found that there was a broad consensus in the research literature that group therapy had strong therapeutic value for a wide variety of psychological problems. Ranging from substance abuse to generalized depression, group therapy was found to be an effective way to address a patient’s concerns. Of course, group therapy is not just sitting in a circle and pouring out your heart. It has value in a number of social and psychological ways and patients benefit when therapists are well trained and are able to guide the conversation.

Medical Help on the Internet
Medical information is proliferating on the Internet (Spitzer, 2004). In many ways it acts like traditional self-help material with the advantage of it being convenient and inexpensive. It also has an advantage over traditional print material in that it can be interactive. As the use of the Internet has expanded, so has the availability of medical information on Internet sites (Glowniak, 1995). Not surprisingly, Internet sources have been used by patients to address medical issues related to family medicine (King, et al, 2007; Vinker, et al, 2007), pediatrics (Wainstein, et al, 2006), spinal blocks (Rossler, et al, 2012), pain management (de Boer, Versteegen, & van Wijhe, 2007), orthopedic problems (Jariwala, et al, 2004), gynecological problems (Neelapala, et al, 2008), and trauma (Bremner, et al, 2006). Patients give high ratings to information on the Internet (Diaz, et al, 2002). Still Internet use has met with mixed level of success. In some instances, the credibility of the information is questionable (Bates, et al, 2006), the information is poorly referenced (Falagas, Karveli, & Tritsaroli, 2008) and patients often have trouble in interpreting the relevance of the information to themselves (Sommerhalder, et al, 2009). These factors can lead users to inaccurate self-diagnosis (Tarkan, 2009). Software can be used by users interactively and the computer can be used as way for patients to reach out to each other and directly communicate as they might in (Manning, 1997).

Medical Internet Bulletin Boards
The use of medical bulletin boards as a way for patients to interact with each other has proliferated over the years. In many ways this particular use of technology has brought the ease
of traditional self-help together with the interactive advantages of group therapy. These boards allow users to seek information while interacting with others, thereby allowing for the broader advantages of traditional group therapy. This may be an advantage to the user who finds traditional group therapy too expensive or time consuming, or if they just want to preserve their anonymity. One of the dangers, however, is that these boards lack the close monitoring of training therapist. Even if the owner of the board is a professional, the volume of posts is often too large for them to keep track and provide close guidance. Additionally, may of the boards are owned by people who are not health professionals or have any training. Like many self-help venues, the vetting process is weak or completely lacking.

This is particularly important because group therapy has many associative benefits when the conversation can be guided to exploit them (Northouse, 2004). Without guidance, the conversation will typically not flow to the more subtle areas of group therapy (Childer, 1989).

Based upon the above analysis the one hypothesis of this study is:

\[ H_1 \] Comment types will not evenly distribute among the various categories of traditional group therapy in internet self-help bulletin boards.

**Method**

To investigate the distribution of message types in medical self-help discussion, a quantitative content analysis was used. Content analysis has been the method of choice for analyzing communication, particularly for studies of mass media. The method of research offers an opportunity to determine the manifest of the bulletin boards.

**Content Analysis**

A sample of 1200 web posts from medical self-help web discussion boards were randomly selected using a Google search of medically related self-help discussion boards. In this case a message was determined to be the discussion of a content subject, whether that message was a sentence fragment, an entire sentence, a paragraph or multiple paragraphs in the selected posts. No attempt was made to limit topics of the boards as long as they were of a medical self-help nature. Among the boards investigated, those with eating disorders, depression, drug addiction and care giving support were investigated.

**Sampling Procedures**

The fifteen coders were divided into three random groups. Each group was randomly assigned web sites to analyze from a Google search using the terms “Discussion Board” and then various medical conditions. The medical terms were brainstormed by the entire group and changed until a sufficient number of sites were collected. Each group was then assigned to collect 400 messages from the randomly assigned sites.

**Training and Intercoder Reliability**

The authors together developed the coding scheme based on the Yalom and Leszcz (2005) taxonomy of group therapy. The coders were trained as to what these categories were and were given example messages of each. They were then given sample message to code and were given feedback until they were able to correctly identify each category. Each group viewed 400 messages and was required to reach consensus on each message and record it into the appropriate section of taxonomy. An analysis was made of the intergroup reliability and it was found to be extremely high (\( r = .94 \)).

**Coding Descriptions**

The groups were told to focus solely on the nature of the messages according to the given taxonomy. No attempt was made to judge the quality of the messages, merely the subject of the messages. The eleven categories from Northouse and Northouse (2004) were:
Instillation of Hope: Letting people know that their problems are solvable (i.e. “I used to think it would never feel better but it really has”).

Feeling of Universality: Letting people know that they aren’t the only ones going through the problem (i.e. “That’s exactly how I used to feel”).

Imparting Specific Information: Giving specific tips of advice (i.e. “Whenever I feel like taking a drink I go for a long walk”).

Feeling of Altruism: Giving people the feeling like they’ve done something positive (i.e. “Wow, your advice really helped me out!”).

Approximate Family Relationships: Using the group to approximate family relationships (i.e. “Wow, I wish my Mom would have given me that advice”).

Improve Relating Skills: Using the group to improve

Imitative Behavior: Copying the behaviors of others in the group (i.e. “I did that thing you did and …”).

Interpersonal Learning: General modeling behaviors not necessarily related to the issue at hand (i.e. “You know, I think it’s cool that you’re a writer, I started working on a manuscript last night”).

Cohesiveness: Adopting a certain set of behaviors just because you want to fit in (i.e. “I thought about taking a hit of coke last night, but I did want to let you guys down”).

Catharsis: Blowing off steam, releasing tension; griping (i.e. “I hate dealing with all the details of having my father committed”).

Existential Factors: Coming to grips with the fact that life isn’t always fair (i.e. “I always thought I got cancer because God hated me for some reason, but you people seem really nice, I guess bad things do happen to good people sometimes.”).

Analysis

A count and percentage was made of each category. A chi-square analysis was conducted among the various categories to determine if the subject count was evenly distributed.

Results

Hypothesis 1 was supported ($\chi^2_{10} = 62.48, p < .001$) as the distribution of comments was found to be unevenly distributed. Table 1 reports the specific distributions of the various categories.

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instillation of Hope</td>
<td>125</td>
<td>10</td>
</tr>
<tr>
<td>Feeling of Universality</td>
<td>188</td>
<td>16</td>
</tr>
<tr>
<td>Imparting Specific Information</td>
<td>324</td>
<td>27</td>
</tr>
<tr>
<td>Feeling of Altruism</td>
<td>115</td>
<td>10</td>
</tr>
<tr>
<td>Approximate Family Relationships</td>
<td>51</td>
<td>4</td>
</tr>
</tbody>
</table>
Imparting Information, and Feelings of Universality (Count = 188, Percentage = 16) were the two most commonly found categories. Existential Factors, Imitative Behaviors, Approximating Family Relationships, Interpersonal Learning and Cohesiveness were most under represented categories.

**Discussion**

The most striking finding of the current study is the preponderance of messages that specially relate to advice giving. Over a quarter of the total messages were Imparting Information. This finding is important because this particular characteristic of group therapy is one which many trained therapists try to steer away from. They claim that it is people’s natural instinct to jump in and give advice. However, therapy in general and group therapy specifically can be effective when it do not focus on specific advice. They feel that patients often do better when they come to information in a revelatory fashion rather than just being told (Childers, 1989).

This result is most likely explained by the unregulated and undirected nature of these bulletin boards. Like self-help books, there is no necessary credentialing or vetting of the moderators even if there are any. Without someone trained in guiding techniques, people naturally gravitate to giving advice, which may be the least useful type of information that the others need.

The two most under represented categories, interpersonal learning and cohesiveness are good examples of where traditional therapy may provide benefit to the patient, but are clearly under used in the computer bulletin boards. Without a therapist to guide the conversation in that direction, these threads typically did not go there.

Beyond the lack of trained moderation, this result may also be a function of the medium itself. The computer bulletin may not be an appropriate medium for these types of comments. Quittner (1995) argued that online interaction lack visual and other nonverbal signals that normal conversations contains. It is argued that computer interactions may actually add to feeling of isolation and depression.

**Limitations and Directions for Future Research**

One limitation of the current research is that no comparison was made between the computer groups and traditional therapy. The analysis was based upon how the comments deviated from a random distribution. This may not be a truly fair comparison as it is unlikely that comments in traditional group therapy would be equally distributed among the eleven categories.
But given the literature on avoiding advice giving, the distribution would likely be different than the one found. Future research should do more head-to-head comparisons between computer and face-to-face groups.

Second, no attempt was made to assess the quality of the comments. The quality of health information on the internet is a strong concern among researchers. Many studies have found that much of the medical information on the internet is questionable at best and downright dangerous in many cases (e.g., Akerkar & Bichile, 2004). This study was focused on the type of comments, not their quality. Future studies should focus on the quality of the information being shared in the computer groups.

Finally, some attempt should be made to assess the participants’ satisfaction with their on-line experience. Many researchers have focused on patient satisfaction in traditional therapy (Citations) and with self-help (e.g., Oravec, 2001). Future research should focus on user satisfaction with their online experiences.
References


