VIRTUAL ABILITY AS V

BY ALICE KRUEGER

Virtual Ability is a community of support for people with many kinds of chronic illnesses and disabilities. It resides in the virtual world Second Life. Its function in the virtual world is supported by a nonprofit corporation, Virtual Ability, Inc.

VIRTUAL COMMUNITY

Geographic communities and communities of interest have been widely studied from many perspectives, including social, anthropological, economic, and developmental. Communities within virtual environments are now being examined as those environments become more pervasive, with related research in varied electronic environments dating back over a decade.

In all usages of the term "community," the affective bonds among members seem to be the most significant defining characteristic (Jones 1997). McMillan and Chavis (1986) outlined a four-dimensional framework describing these bonds. The dimensions include: feelings of membership and belonging; feelings of having and being influenced by the community; feelings of being supported and providing support; and feelings of relationships and emotional connection.

Community members are aware of these feelings, making it difficult to determine whether these characteristics define the community or are an outcome of community functioning (Garcia, Giuliani, & Wiesenfeld 1999). Awareness of these characteristics is termed the Sense of Community (SOC). Community members experience SOC as a feeling of "belonging, a feeling that members matter to one

TABLE 1: Sense of Community Dimensions and Studies

SOC Dimension	Representative Studies in Virtual Communities
Membership	Baym 1995, 1997; Blanchard & Markus 2004; Donath 1996; Greer 2000; Kollock & Smith 1994; Markus, Manville & Agres 2000; Phillips 1996
Influence	Baym 1997; Dholakia, Bagozzi & Pearo 2004; Kollock & Smith 1994; McLaughlin, Osborne & Smith 1995; Pliskin & Romm 1997
Support	Baym 1997; Blanchard & Markus 2004; Greer 2000; Preece 1999; Rheingold 1993
Emotional Connections	Blanchard & Markus 2004; Greer 2000; Preece 1999; Rheingold 1993

another and to the group, and a shared faith the members' needs will be met through their commitment to be together" (McMillan & Chavis 1986, p. 9). Elements of SOC are influenced by environmental factors (Pretty 1990).

McMillan and Chavis (1986) proposed a theoretical model to account for the origins of SOC. Membership identification and the sense of belonging arise from perceptions of safety within community boundaries and are related to time invested within the community. The community and the individual mutually influence each other through interactions between a need for individual validation and a need for conformity to norms. Need fulfillment and support are mutually established, and come through competent group functioning as an earned value. Emotional connections and relationships are created over time through participation in quality interactions and group events, and engagement in the group's development.

An SOC measure has been developed and used extensively in many research contexts. Elements from all four dimensions of SOC have been identified in numerous virtual community settings, as shown in Table 1. Yet virtual community characteristics are not identical to those of other communities. Blanchard and

Markus (2002) claim that while the process of offering and receiving support is identical in virtual and other communities, two related processes that may be unique to virtual communities are creating a personal identity and identifying others as legitimate community members; and developing trust among community members.

Koh and Kim (2004) propose that leaders' enthusiasm, off-line activities, and enjoyability are also factors in virtual SOC. Blanchard and Markus (2004) explain that the dimensions of SOC in a virtual setting are modified by the communication modality (electronic vs.

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face-to-face). Preece (2000) introduces the concepts of sociability (collective purpose) and usability (accessibility) of virtual communities. Blanchard (2008) includes interactions with others outside the virtual community as a mediator of SOC in a virtual setting. Koh et al. (2007) distinguish different levels of member participation in virtual communities.

Individuals enter all types of virtual environments most often to obtain information (Ridings & Gefen, 2006). However, the second most popular reason for joining communities created around health/wellness and professional/occupational topics was "social support",

while "friendship" was the second most popular reason among members in communities related to personal interests.

Virtual Ability in Second Life displays the four dimensions of sense of community, as shown in Table 2.

Significant benefits accrue for people with disabilities from being in a virtual world. Murphy et al. (2012) found that participation by people with disabilities in Second Life significantly decreased depressive symptoms, trait anxiety, and loneliness, concurrent with significant improvements in positive affect, life satisfaction, and self-esteem.

The saying is that "it takes a village to raise a child." Virtual Ability has found that it takes a community to allow an individual to become complete.

ABOUT THE AUTHOR

Alice Krueger is president of Virtual Ability, Inc., a nonprofit corporation whose mission is to support the participation of persons with disabilities in virtual worlds. She has taught primary through college-level science and special education, conducted educational research for a national laboratory, and has published several academic articles about virtual world participation by persons with disabilities.

TABLE 2
Sense of Community Dimensions and Studies

SOC Dimension	Examples in Virtual Ability
Membership	Members self-identify as belonging to Virtual Ability. Members are protective of other members, especially when in the presence of people who don't understand disabilities.
Influence	The group is diverse, respectful of individual differences, yet always maintains a PG setting. Members offer assistance to newcomers entering Second Life on Virtual Ability Island, passing on what they have learned. Members offer skills classes and conduct tours of interesting places they have found, to share with others.
Support	Members use the Group Chat function to request information, advice, or simply a virtual hug of reassurance from other members who are concurrently online. Members provide assistance to others when asked. Members offer testimonials indicating support received from the community.
Emotional Connections	Members ask leaders and other members about the health and well-being of those who have not appeared inworld for lengths of time. Those with a planned hospitalization or absence report to someone so others will know where they are. Virtual memorial services are held for community members who have died.

REFERENCES for Virtual Ability as Virtual Community

Baym, N 1995, 'The emergence of community in computer mediated communication', in SG Jones (ed.) *Cybersociety: Computer mediated communication and community,* Sage, Thousand Oaks, CA, pp. 138-163.

Baym, N 1997, 'Interpreting soap operas and creating community: Inside an electronic fan culture', in S Keisler (ed.) *Culture of the Internet,* Lawrence Erlbaum Associates, Manhaw, NJ, pp. 103-120.

Blanchard, AL 2008, 'Testing a model of sense of virtual community', *Computers in Human Behavior* 24, pp. 2107-2123.

Blanchard, AL & Markus, ML 2002, 'Sense of virtual community: Maintaining the experience of belonging', Proceedings of the 35th Hawaii International Conference on System Sciences. 35th *Hawaii International Conference on System Science,* Waikoloa, HI.

Blanchard, AL & Markus, ML 2004, 'The experienced "sense" of a virtual community: Characteristics and processes', *Newsletter ACM SIGMIS Database,* vol. 35, no. 1.

Dohlakia, UM Bagozzi, RP & Pearo, LK 2004, 'A social influence model of consumer participation in network- and small-group-based virtual communities', *International Journal of Research in Marketing,* vol. 21, pp. 241-263.

Donath, JS 1996, 'Identity and deception in the virtual community', in P Kollock & M Smith (eds.), *Communities in Cyberspace,* Routledge, London, pp. 29-59.

Garcia, I, Giuliani, F & Wiesenfeld, E 1999, 'Community and sense of community: The case of an urban barrio in Caracas', *Journal of Community Psychology* 27(6), pp. 727-740.

Greer, BG 2000, 'Psychological and social functions of an e-mail mailing list for persons with cerebral palsy', *CyberPsychology,* vol. 3, pp. 221-233.

Jones, Q 1997, 'Virtual communities, virtual settlements, and cyber-archaeology: A theoretical outline". J*ournal of Computer-Mediated Communication,* vol. 3, viewed 20 October 2011, <jcmc.indiana.edu/vol3/issue3/jones.html>

Koh, J & Kim, Y-G 2004, 'Sense of virtual community: A conceptualization framework and empirical validation', *International Journal of Electronic Commerce*, vol. 8, no. 2, pp. 75-93.

Koh, J, Kim Y-G, Butler, B & Bock, G-W 2007, 'Encouraging participation in virtual communities', *Communications of the ACM,* vol. 50, no. 2, pp. 69-73.

Kollock, P & Smith, M 1994. *Managing the virtual commons: Cooperation and conflict in computer communities,* viewed 20 October 2011, <http://www.sscnet.ucla.edu/soc/csoc/papers/virtcomm/Virtcomm.htm>

Markus, ML, Manville, B & Agres, C 2000, 'What makes a virtual organization work: Lessons from the open source world', *Sloan Management Review,* vol. 42, pp. 13-26.

McLaughlin, ML, Osborne, KK & Smith, CB 1995, 'Standards of conduct on Usenet'. in SG Jones (ed.). *Cybersociety: Computer mediated communication and community.* Sage, Thousand Oaks, CA, pp. 90-111.

McMillan, DW & Chavis, DM 1986, 'Sense of community: A definition and theory', J*ournal of Community Psychology,* vol. 14, no. 1, pp. 6-23.

Murphy, N, Gilbert, R, Krueger, A, Ludwig, A & Effron, T 2012, 'Social-emotional outcomes of Second Life for individuals with disabilities,' Poster accepted for presentation for the Meeting of the Society for Personality and Social Psychology (January, 2012).

Phillips, DJ 1996., 'Defending the boundaries: Identifying and countering threats in a Usenet newsgroup', *The Information Society,* vol. 12, pp. 39-62.

Pliskin, N & Romm, CT 1997, 'The impact of email on the evolution of a virtual community during a strike', *Information and Management,* vol. 32, pp. 245-254.

Preece, J 1999. 'Empathic communities: Balancing emotional and factual communication', *Interacting with Computers,* vol. 12, pp. 63-77.

Pretty, GMH 1990, 'Relating psychological sense of community to social climate characteristics', *Journal of Community Psychology,* vol. 18, no. 1, pp. 60-65.

Rheingold, H 1993, *The virtual community: Homesteading on the electronic frontier,* Addison-Wesley, Reading, MA.

Ridings, CM & Gefen, D 2006, 'Virtual community attraction: Why people hang out online', Jvol. 10, no. 1.