

An Exploration of Why People Participate in *Second Life* Social Support Groups

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The present study investigates why people participate in Second Life social support groups. Twenty-three participants in Alcoholics Anonymous and Cancer Caregiver groups that meet in Second Life were interviewed and asked how satisfied they are with those meetings, what influences their satisfaction, what they find most helpful, what they like the least, the nature of their relationships in the group, and what surprised them the most. Their responses identify the text-based anonymity, nearly synchronous communication, visual representation of avatars, and use of time and virtual space as influences that stimulate hyperpersonal relationship development in their Second Life social support groups.

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Social support groups provide physical and mental health benefits to people coping with chronic diseases, long-term disabilities, socially stigmatized behaviors, and other stressful life circumstances (Coulson, 2005; Till, 2003). An individual's depression, quality of life, and disease survival rates are often positively affected by participation in a social support group (Coulson, 2005; Wright & Bell, 2003). Computer-mediated communication (CMC) social support group participation has grown steadily and membership in a CMC social support group currently numbers in the millions (Gustafson, Hawkins, McTavish, Pingree & Shaw, 2006).

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CMC Social Support Groups

Computer-mediated communication social support groups offer an opportunity to exchange information and emotional support with people in similar life situations who do not live nearby (Lin & Anol, 2008; Rodgers & Chen, 2005; Tanis, 2008). Group meetings provide informal sessions in which participants can discuss specific topics of mutual interest; talk openly with others in similar circumstances; and express thoughts, fears, and concerns (Cawyer & Smith-Dupre, 1995; Tanis, Das, & Fortgens-Sillman, 2009). The social routine of the group removes the institutional formality of therapy sessions and allows individuals to vent frustrations, reduce stress, and meet their need for affection, approval, belonging, self-esteem, identity, and security (Cawyer & Smith-Dupre, 1995; Wright, 1999; Wynns & Rosenfeld, 2004).

Advantages of CMC Social Support Groups

Numerous researchers have identified the advantages of CMC social support groups over face-to-face group meetings. The anonymous, asynchronous, text-based communication and connectivity characteristics of CMC are identified as among the most important advantages, especially for people who feel uncomfortable discussing sensitive issues or who have difficulty developing close face-to-face relationships (Wright, 2002a, 2002b). Anonymity exists in CMC social support groups since individuals are not visible to other group members. The asynchronous communication allows individuals to use group information at times and locations of their choosing. The text-based communication medium provides an additional therapeutic advantage and removes the immediate face-to-face reactions of others, offering an environment in which to discuss sensitive topics (Campbell & Wright, 2002; Wright, 2002a, 2002b). The connectivity to a large, weak-tie network of people who have diverse backgrounds, similar experiences, and varied attitudes makes multiple sources of information and diverse viewpoints available to the CMC social support group participant. Together these characteristics increase an individual's sense of confidentiality and willingness to disclose personal information, and reduce the sense of isolation and potential for stigmatization resulting from having a disability or disease (Wright & Bell, 2003).

The ability to personalize and yet delimit the interactions by discreetly arriving and leaving when desired is an additional advantage of most types of CMC social support groups (Colvin, Chenoweth, Bold, & Harding, 2004). Computer-mediated social support groups offer flexible information delivery and a variety of social support facilitation options in a convenient and accessible manner, as compared to geographically distant face-to-face group meetings, while requiring comparatively few resources. This is especially important for a person with a physical disability due to illness or a time constraint on being physically present (Sen, 2008; Till, 2003). Member connectivity replaces geographic proximity (Anderson & Emmers-Sommer, 2006). Participants can access support when a regular face-to-face meeting is not available and they can access that support from home, which is more convenient than traveling to a meeting (Van Lear, Sheehan, Withers, & Walker, 2005).

A sense of personal empowerment and control over the communication and a privacy is built upon this anonymous, accessible connectivity (Nicholas, Picone, Vigneaux, McCormick, McClure, & MacCulloch, 2009). The anonymous, asynchronous nature of the communication provides a time and space independence, a flexibility in if and when to read and write social support messages, and the ability to passively lurk—retrieving information without disclosing one's presence or personal interest in the topic (Sen, 2008). This allows a participant to dispense with relationship building before assessing the value of the information, advise, or support available (Sen, 2008; Tanis, Das, & Fortgens-Sillman, 2009).

In times of crisis, connectivity to an extended weak-tie relational network becomes even more beneficial in mitigating stress, providing emotional support, and meeting informational needs (Sen, 2008). Weak-tie social support networks provide a forum in which members can share personal information, experience emotional sympathy, develop self-esteem, and feel personally empowered (Oh & Lee, 2009). The relative anonymity of these networks provides a sense of safety, fosters greater self-disclosure, provides access to first-hand experience and advice from others, and facilitates emotional support through the sharing of stories with others who truly understand (Tanis, Das, & Fortgens-Sillman, 2009). Participants in CMC social support groups value all three: the information, the relationships, and the sense of togetherness (Pfeil, Zaphiris, & Wilson, 2010).

Relational Disadvantages of CMC Social Support Groups

Computer-mediated communication social support groups have potential disadvantages as well. Wright and Bell (2003) argue that the lack of nonverbal social cues and reduced social presence can create the potential for hostile messages and difficulties in contacting a specific person for additional information, emotional support, or developing an ongoing long-term relationship. Colvin, Chenoweth, Bold, and Harding (2004) cite a lack of interpersonal physicality, a desire for greater relational intimacy, an inability to provide tangible support, information inadequacy, potential violations of personal privacy and confidentiality, formation of cyber-clique subgroups from which others feel excluded, and technical problems as additional concerns. Relational commitment can challenge group participation as well (Lin & Anol, 2008); and groups sometimes experience breaches in relational trust (Beaudoin, 2008; Pfeil, Zaphiris, & Wilson, 2010; Feng-yang & Chia-ping, 2009).

In sum, the major advantages of participating in a CMC social support group reside in the text-based, anonymous, asynchronous, convenient, and accessible communication within a weak-tie network that: enhances privacy and confidentiality of personal information; reduces stigma, marginalization, embarrassment, and isolation; and requires fewer personal-social resources while enhancing personal control over interactions and allowing passive lurking. Potential disadvantages are relational in nature, affected by the reduced nonverbal social cues, absence of physicality, lack of tangible support, and inadequacy of information, that can result in interpersonal trust violations and difficulty in forming long-term relationships.

Table 1 summarizes the advantages and disadvantages. This list of advantages and disadvantages, however, is based on research with CMC social support groups that meet through text-based discussion forums such as bulletin board discussions (Campbell & Wright, 2002; Coulson, 2005; Eichhorn, 2008; Pfeil, Zaphiris, & Wilson, 2010; Rodgers & Chen, 2005), mailing lists (Till, 2003), and website postings (Bunde, Suls, Martin, & Barnett, 2006; Colvin, Chenoweth, Bold, & Harding, 2004). Little research has investigated the more synchronous forms of CMC social support provided by groups meeting in virtual environments such as *Second Life*.

Second Life (SL) is a three-dimensional virtual world and relatively new form of CMC that differs in several ways from bulletin board discussion groups, mailing lists, and websites (Antonijevic, 2008; Bell, 2008; Diehl & Prins, 2008; Paul, 2009). Norris (2009) reports that there are currently more than 152 social support groups that meet in *Second Life*, with more than 10,000 participants. Given the other available forms of CMC social support groups and face-to-face options, why do people choose to participate in social support groups in *Second Life*? How do the *Second Life* groups provide a similar or different experience compared to these other forms of CMC and face-to-face group social support?

Social Support in *Second Life*

Second Life has 15.5 million registered users participating in a virtual space four times the size of New York City (Flowers, Gregson, & Trigilio, 2009; Kingsley & Wankel, 2009). Within this environment participants create symbolic visual representations of themselves called avatars, and interact with other participants in a three-dimensional virtual reality using public and private forms of nearly synchronous text messaging (Gong & Nass, 2007; Martin, 2008; Sherblom, 2010).

Second Life provides an anonymity and connectivity to a weak-tie network through text-based communication with a degree of convenience and accessibility. Participants communicate in a virtual environment that does not require them to leave their homes to attend a social support group meeting. That social support group meeting, however, occurs at a predetermined time and place within a virtual environment, and there is a social structure and routine to the meetings. The medium does not allow as much personal discretion over when to arrive or leave the meetings. Although passive lurking occurs, it is more difficult to lurk inconspicuously. Therefore passive lurking without detection and relational interaction in the social support group is less likely.

Second Life also provides a greater variety than other text-based forms of CMC of symbolic, user-generated, nonverbal acts, such as in the use of time and space (Antonijevic, 2008). *Second Life* avatars produce a sense of virtual physicality, interact socially, and have been shown to participate in interpersonal and small-group communication processes in symbolically different ways than those occurring in other forms of text-based CMC or in face-to-face encounters (Boellstorff, 2008; Harrison, 2009; Nowak & Rauh, 2006; Sherblom, Withers, & Leonard, 2009). These

Table 1 Comparison of CMC and *Second Life* Social Support Group

| CMC Social Support Group Advantages | Literature References: | Second Life Communication Advantages |
|--|--|---|
| Text-based: written communication | Wright (2002a, 2002b) | Text-based: written communication |
| Anonymous: No face-to-face Interaction eases discussion of sensitive topics | Wright (2002a, 2002b) Wright & Bell (2003) Colvin, Chenoweth, Bold, and Harding (2004) Sen (2008) | Anonymous: No face-to-face interaction eases discussion of sensitive topics |
| Privacy, Confidentiality of personal information Reduces Stigma, marginalization, embarrassment | Nicholas, et al. (2009) Oh & Lee (2009) Tanis, Das, & Fortgens-Sillman (2009) | Privacy, Confidentiality of personal information Reduces stigma, marginalization, embarrassment Increased empathy experienced in groups. |
| Asynchronous Communication: able to write and edit messages before sending | Wright (2002a, 2002b) Colvin, Chenoweth, Bold, and Harding (2004) Sen (2008) | Visual, Avatar-to-Avatar communication increases feeling of being together during meetings, more personality Asynchronous Communication in Real-Time: able to write and edit messages before sending Nearly synchronous: instant messages allow immediate response, feedback, exchange |
| Convenient, Accessible: Flexible, easy to use, Few resources required, ease of social support facilitation, no geographical distance, no physical presence required or real-time constraints; Access from home without travel | Till (2003) Van Lear, Sheehan, Withers, & Walker (2005) Sen (2008) Nicholas, et al. (2009) | Convenient, Accessible, but at Specific Times: Meet from home. More convenient than traveling to meetings; but specific meeting times and social routines. Available: Others available. Immediacy of feedback (through IMs) and social support during meetings and when needed at other times. |
| Connectivity to Weak-Tie Network, Similar Others: Expanded social network of like-minded others, access to multiple sources, diverse viewpoints. Similar experience, empathy among group members rather than geographic proximity. Reduced Isolation. | Wright & Bell (2003) Colvin, Chenoweth, Bold, & Harding (2004) Anderson & Emmers-Sommer (2006) Sen (2008) Nicholas, et al. (2009) Oh & Lee (2009) Pfeil, Zaphiris, & Wilson (2010) | Connectivity to Weak-Tie Network of Others: Global social network of others, multiple, diverse viewpoints from many different countries. Similar experiences, empathy, reduced isolation. |

Table 1 (Continued)

| CMC Social Support Group Advantages | Literature References: | Second Life Communication Advantages |
|---|--|---|
| Personal Control of Interaction, Passive Lurking : passive access to information and support; Advice without relational commitment; Begin, end group access discretely, without notice or consent of others. | Colvin, Chenoweth, Bold, Harding, (2004) Sen (2008) Oh & Lee (2009) Tanis, Das, & Fortgens-Sillman (2009) | Virtual World: real-time communication, symbolic visual representation in a virtual space Passive Lurking Not Easy: less discretion over when to arrive or leave group meeting |
| Relationship Development: Sharing information, understanding, and personal shortcomings, with like-minded others | Colvin, Chenoweth, Bold, & Harding (2004) Tanis, Das, & Fortgens-Sillman (2009) Pfeil, Zaphiris, & Wilson (2010) | Shared Presence, Relationship Development: Presence of avatars at meetings, more relational interaction, participation, sharing, relationships |
| Relationship Disadvantages | | Second Life Relationship Advantages |
| Reduced Nonverbal Social Cues, Social Presence: Reduced immediacy, relational obligations, Increased potential for hostile messages | Wright and Bell (2003) Colvin, Chenoweth, Bold, & Harding (2004) | Virtual Social Cues: Time, Space, Avatar Social Presence: Avatars represent people, Interact in real time and virtual space |
| Difficulty Developing Relationships in weak-tie groups; Lack of social-relational contact, intimacy | Wright & Bell (2003) Colvin, Chenoweth, Bold, & Harding (2004) | Relationship Development: Greater long-term social-relational contact and intimacy |
| Difficulty Contacting Specific Person to seek informational or emotional support | Wright & Bell (2003) | Ease of Contacting Specific Individual Person: IM during meeting; People available at other times; Always someone online and available |
| Absence of Physical Relationship | Colvin, Chenoweth, Bold, & Harding (2004) | Virtual Contact: Avatar, but lack of real touch or voice, inability to speak or physically hug |
| Relational Group Communication Complaints: Information Adequacy, Privacy, Confidentiality; Exclusion from Subgroups; Technical Problems | Colvin, Chenoweth, Bold, & Harding (2004) | Privacy, Confidentiality Assumed Expectation of Synchronous Communication Technical Problems such as Computer Lag |
| Relationship Commitment Concerns, Interpersonal Trust Vulnerability | Lin & Anol (2008) Pfeil, Zaphiris, & Wilson (2010) | Hyperpersonal Relationships Develop: Built on Interpersonal Trust |

differences in the communication medium are likely to affect a person's experience in the social support group.

Types of Social Support Groups

Past researchers have examined many different types of CMC social support groups, including groups that deal with: cancer-related diseases (Rumsey, 2004; Sen, 2008; Till, 2003; Turner, Grube, & Meyers, 2001), caregivers for older adults (Colvin, Chenoweth, Bold, & Harding, 2004), chronic kidney disease (Nicholas, et al., 2009), eating disorders (Eichhorn, 2008), immigrant cultural adaptation (Choi & Chen, 2006), irritable bowel syndrome (Coulson, 2005), mental illness (Yun, Park, Kim, Yoo, Kwak, & Kang, 2004), older people (Pfeil, Zaphiris, & Wilson, 2010), patient empowerment (Oh & Lee, 2009), physical disabilities (Braithwaite, Waldron, & Finn, 1999), and women in science and engineering (Kleinman, 2000). At times researchers have included multiple types of groups in a study. Wright (1999, 2000) investigated alcohol, substance abuse, eating-disorders, terminal-illness, bereavement, abuse-survivor, mental-illness, parenting-issues, and divorce social support groups. Campbell and Wright (2002) examined substance abuse, cancer, HIV/AIDS, Alzheimer's, eating disorders, depression, and divorce social support groups. Few researchers, however, have drawn comparisons between groups in the same study. For comparison purposes the present study examines two types of social support groups that meet regularly in *Second Life*: Alcoholics Anonymous and Cancer Caregivers.

Alcoholics Anonymous

Alcoholics Anonymous (AA) is one of the oldest social support groups in existence, and several AA groups meet in *Second Life* (Van Lear, Sheehan, Withers, & Walker, 2005). Alcoholics Anonymous relies heavily on a shared ideology and this ideological bond facilitates group cohesion and trust. As individuals internalize group values, expectations, and standards, they come to identify with the group (Wright, 1997). During meetings group members accept the validity of a person's message and offer them support (Davey-Rothwell, Kuramoto, & Latkin, 2008; Kabela-Cormier, Kadden, Litt, & Petry, 2007). Then other group members describe their own experiences which may corroborate or question that person's self-presentation (Van Lear, Sheehan, Withers, & Walker, 2005).

Cancer Caregivers

Expanding life spans and the often chronic nature of diseases make care giving an increasingly common activity as close relatives must care for family members who are sick (Miller, Shoemaker, Willyard, & Addison, 2008). The demands of care giving are complex and stressful to the caregiver. They can disrupt a caregiver's daily life, alter sleep patterns, require emotional adjustment, create an unwanted confinement, and negatively affect physical and mental wellbeing (Tanis, Das, &

Fortgens-Sillman, 2009). The negative consequences of this disruption are mitigated by social support, but caregivers experience difficulty getting to meetings or finding people in their personal-social network to provide that support, and are often too embarrassed or ashamed to talk about their feelings with family members or others who are close to them (Tanis, Das, & Fortgens-Sillman, 2009). Computer-mediated communication cancer-caregiver groups offer social support that benefits caregivers: reducing social isolation, fear, sorrow, depression, loneliness, emotional strain, and even alleviating the symptoms of physical problems such as weakness, tiredness, and overall poor health (Colvin, Chenoweth, Bold, & Harding, 2004; Miller, Shoemaker, Willyard, & Addison, 2008; Tanis, Das, & Fortgens-Sillman, 2009; Wright, 2002a).

Research Question

The primary research question of the present study is: Given the variety of available options, such as CMC bulletin board discussions, mailing lists, website postings, and face-to-face social support groups, why do people choose to participate in *Second Life* groups?

RQ: Why do people participate in *Second Life* social support groups?

Method

Procedures

The present study located potential *Second Life* social support groups for the study by using the search function with a search term of “social support.” Selection criteria were: number of individuals in the group (more than three), activity level of the group (current activity), frequency of group meetings (at least once a week), and a meeting time that permitted the researcher to attend the meetings (Eastern time zone). In addition, to maintain comparability with past CMC research studies of online, text-based, discussion forums, groups using voice capabilities were excluded. One Cancer Caregivers group and two Alcoholics Anonymous (AA) groups, a general AA group and a Friends of Bill W group, were selected for the study.

For each group the principal investigator received permission from the group leader and members to attend the group meetings, and to approach the group members individually after meetings via a private instant message (IM) to ask if they would participate in a one-on-one interview. Each interview lasted 30 to 45 minutes depending upon the communication style of the respondent in providing answers to the questions. After the interviews were completed avatar names were removed from the data and participant responses were analyzed and organized into themes.

Participants

Twenty-three individuals agreed to participate in the interviews. Two individuals, both from the AA group, refused due to time constraints. In total 7 Cancer Caregiver

members and 16 AA members were interviewed (11 from the AA group and 5 from Friends of Bill W). Experience with *Second Life* (SL) ranged from several days to more than 5 years. Membership in the social support group ranged from attendance at two meetings to participation for more than 3 years. Interviews were conducted one at a time and saturation of observations appeared achieved by the 18th interview. An additional five interviews were conducted which reiterated and supported the previous observations but provided no new perspectives.

Interview Questions

The researcher asked each interview participant to respond to the following set of questions:

1. I know you attend the SL support group:
 - 1.a Do you also go to face-to-face meetings outside SL?
 - 1.b How does your participation in the SL support group differ from your face-to-face support group participation?
2. Have you participated in any online discussion boards in addition to the support group in SL?

If yes: How does participation in SL support group differ from a typical online discussion board?
3. What motivated you to participate in the SL support group?
4. On a scale from 1–7, where 7 is very satisfied, how satisfied are you with your experience in this support group in *Second Life*?
5. What influences your satisfaction?
6. In what ways do you believe the SL support group is helpful to you?
7. What do you like least about participating in this support group in SL?
8. What is your relationship with the group members in the SL support group?
9. Have you developed any personal friendships with group members? In what capacity?
10. What surprised you the most as a participant in the SL support group?

Analysis

Responses to the interview questions provided data for the descriptive results, for the comparisons with online text-based discussion forums and face-to-face social support groups, and for the thematic analysis. The thematic analysis used a constant comparison method, going back and forth from the text to the context, to broader concepts, and to emergent themes, while checking and revising interpretations as needed (Glaser & Strauss, 1967). The researchers read and reread the text, reflected on its meaning, and examined the implications presented by its context (Colvin, Chenoweth, Bold, & Harding, 2004; Strauss & Corbin, 1990). Using the constant comparison method helped the researchers continually refine the categories, develop responses into themes, and interpret respondent comparisons of *Second Life* to other

types of online text-based forum and face-to-face social support group participation (Glaser, 1978, 1992).

Results

In addition to meeting in *Second Life*, more than half (12 of 23) of the participants continued to attend face-to-face meetings. Two other participants had attended face-to-face meetings in the past but now only attended the *Second Life* group meetings. Participants identified anonymity as an important way in which the *Second Life* social support group differed from face-to-face meetings. The AA group members, for example, noted that although the meeting formats were very similar, the anonymity of *Second Life* allowed a deeper discussion of issues in a more open atmosphere. A Cancer Caregiver member reported that the *Second Life* meetings moved at a faster pace.

Fourteen members continued to participate in online discussion boards. These participants identified the nearly synchronous communication of *Second Life* as superior to the asynchronous communication of the discussion boards. They appreciated the real-time connection and the sense of being present with others. The visual representation of avatars provided a sense of connection to the person and felt more real than meeting people on a discussion board. One participant noted that if you let yourself become immersed you feel like you are there with the other participants.

On a scale from 1 to 7 (with 7 indicating satisfaction), participants rated their satisfaction as high, with ratings ranging from 3 to above 7, and an average rating of 6.5. Several members rated their satisfaction as a 10. These ratings were recoded to 7.

Only a couple of participants expressed a degree of dissatisfaction. An AA member noted that getting real is not a salient point in *Second Life*, but still rated overall satisfaction as a 5. A Cancer Caregiver member rated satisfaction as a 3, but expressed disappointment with the people in the group rather than with *Second Life*.

Two general themes emerged from responses to the questions about what participants found helpful and liked least, the nature of their relationships and friendships, and what surprised them most. The first theme describes their response to *Second Life* as a real-time, nearly synchronous, text-based, convenient medium for communication that has visual components and interpersonal avatar interactions. Participant responses contrasted these aspects of *Second Life* to their participation in online, text-based, discussion forums and to face-to-face social support groups. A second theme describes relationship development within the groups as characterized in their feelings of being family, friends, and community; being connected and understood; and being emotionally involved. These two themes of *Second Life* as a communication medium and relationship development are presented in Table 2.

Second Life as a Communication Medium

Visual. “The visual affect is important in SL. I am slowly changing the atmosphere where we meet so that we can be closer together. So I added the fireplace and someone

Table 2 Second Life as a Communication Medium for Social Support Group Relationship Development

Theme 1: Second Life as a Communication Medium

Advantages of Second Life as a Communication Medium

| | |
|---|--|
| Visual | <p>“SL has a visual component.” (AA)</p> <p>“The visual effect is important in SL. I am slowly changing the atmosphere where we meet so that we can be closer together. So I added the fireplace and someone else added the couches. [We are] trying to make it look less like a waiting room, warming it up so that the caregiver and survivor can come and get away for a bit, and be taken care of for a bit by others.” (CC)</p> <p>“I like it a lot better now that we changed where we meet. The pillows are better than the chairs.” (CC)</p> |
| Avatars | <p>“Seeing other AVs and knowing they are connected to real folks” (AA)</p> <p>“Something better about talking to an online avatar” (AA)</p> <p>“Resembles a person more so than plain text” (AA)</p> <p>“It’s nice to see who is speaking” (AA)</p> <p>“In SL I connect with people I can see and touch” (AA)</p> <p>“Feel like a real person to me” (AA)</p> <p>“Truly different to meet face-to-face even when those faces aren’t real” (AA)</p> <p>“It’s nice to see who is speaking, even if it’s not their true face. It gives you something other than the typed word.” (AA)</p> <p>“There is something better about talking to an online avatar. It resembles a person more so than plain text on a forum type discussion, it adds that little bit of extra dimension.” (CC)</p> |
| Real-Time, Nearly synchronous | <p>“You have the time element” (AA)</p> <p>“‘real time’ communication” (AA)</p> <p>“Less of a chance of misunderstanding” (AA)</p> |
| Convenient, Accessible Connectivity | <p>“Convenience” (AA)</p> <p>“We are from all over the place, but can all meet at the same time and same place in SL.” (AA)</p> <p>“It’s easier to get to.” (AA)</p> <p>“Someone responding to my request for someone to talk to.” (AA)</p> <p>“Getting away for a meeting [in RL] can be nearly impossible.” (CC)</p> |
| Text-Based | <p>“I am better at writing my feelings than speaking them out loud.” (AA)</p> |
| Compared to Online, Text-Based Discussion Forums | <p>Online forums “were rather useless for me. They did not keep up. Often posts were a week apart.” (AA)</p> <p>“There was no sense of community or family [in online forums].” (AA)</p> <p>“ You feel like you are there [in SL].” (AA)</p> |

Table 2 (Continued)

Theme 1: Second Life as a Communication Medium

| | |
|--|---|
| | <p>“There is more opportunity for self-expression and for making connections that are more genuine [in SL].” (AA)</p> <p>“It does feel more real than just discussion boards.” (AA)</p> <p>There is “less of a chance of misunderstanding and there is a lack of attitude from younger people and newer members here than in e-boards or F2F meetings.” (AA)</p> <p>“In e-boards and e-groups flame wars can break out. Here [in SL] we don’t have that.” (AA)</p> <p>“Forums online were too impersonal.” (CC)</p> <p>“People are more available in SL than on the forums.” (CC)</p> <p>“SL gives just enough personality.” (CC)</p> |
| <p>Compared to Face-to-Face Social Support Groups</p> | <p>“Functions the same way a group in RL does” (AA)</p> <p>“Very accurate to what a real meeting would be like” (AA)</p> <p>“The exchanges are near RL” (AA)</p> <p>“Doesn’t differ (from RL) that I know of” (AA)</p> <p>“Was surprised to see how alike they are [SL and RL]” (AA)</p> <p>“The truly big difference with the SL group from the RL is the anonymity. You don’t have to worry about being recognized.” (AA)</p> <p>“I live in a small town and there are a few things I can talk about here that I can’t talk about in F2F groups.” (AA)</p> <p>There is “Less give and take unless you are also IMing people, no facial expression, otherwise, not much [difference].” (AA)</p> <p>“It’s easier to get to and more open in some ways. People talk about deeper issues than in RL meetings. Plus, using IM’s you can get deeper insights into someone else’s similar issues. We are doing some deep work. I wouldn’t do this in a RL group.” (AA)</p> <p>“Recently I have been sick and not able to get out as much. The SL AA group provides me almost the same continuity as my home group in RL does. People get to know you, ask you how you’re doing, really want to know, and provide a really close family here. I can go to one of the AA Groups here at any time of day or night and call out and someone will be there to talk to.” (AA)</p> <p>“I have tried using hot lines. I have tried calling for help. When I have reached out for help, sometimes in RL no one was there. In SL I can let folks know that I need to talk to someone and 10 people will respond.” (AA)</p> |
| <p>Disadvantages of Second Life as a Communication Medium</p> | <p>“The lack of sound” (AA)</p> <p>“There is no voice” (AA)</p> <p>“I [would] benefit from hearing more.” (AA)</p> <p>“Dependent on the ability to communicate in text” (AA)</p> <p>“It’s more like reading about a meeting than being in one.” (AA)</p> |

Table 2 (Continued)

Theme 1: Second Life as a Communication Medium

- “My inability to keep attention on the letters written” (AA)
 - “Slowness of the meeting because of typing” (AA)
 - “Lots of lag delays” (AA)
 - “Not being able to touch people” (AA)
 - “The [RL] distractions” (AA)
 - “Sometimes the meetings can be interrupted by other [RL] things that are not always apparent.” (AA)
 - “It’s not quite a complete experience. Something is missing.” (AA)
 - “Lag” (CC)
 - “I can’t really give a hug for real.” (CC)
-

Theme 2: Relationship Development in Second Life Social Support Groups

Advantages of Relationship Development in Second Life Social Support Groups

**Family, Friends,
and Community**

- “Friends” (AA)
 - “We are friends” (AA)
 - “Casual friends; Fellow members” (AA)
 - “I consider some friends” (AA)
 - “Yes I have friendships” (AA)
 - “Some are friends, some are acquaintances” (AA)
 - “I consider them to be good acquaintances” (AA)
 - “I’ve talked to a few people outside of the group meetings” (AA)
 - “I have best friends in that group” (AA)
 - “I see them as my dear friends” (AA)
 - “I admire many of them” (AA)
 - “People are dedicated” (AA)
 - “It’s a wonderful, loving community” (AA)
 - “I feel like we are in a community” (AA)
 - “Family really” (AA)
 - “I am able to talk to and with others who are also alcoholics and they help me make it through another day sober.” (AA)
 - “I get to meet people from all over the world, and with all different interests and beliefs. I couldn’t do that in RL.” (AA)
 - “I go to meetings with people from Japan, Germany, UK, all willing to be present and ‘there’ for me and for each other.” (AA)
 - “I get a deeper understanding of different topics, basic human needs to be seen, heard, understood, appreciated, known, across barriers of worlds.” (AA)
 - “Meeting people across the globe offers a much more satisfying experience than being around people who are more likely [similar] to my upbringing and experiences in real life.” (AA)
-

Table 2 (Continued)

Theme 2: Relationship Development in Second Life Social Support Groups

| | |
|---------------------------------|--|
| | <p>“It [has] opened my eyes to very different experiences relating to one shared problem. I feel like I am not alone in the problem and can see that others have gone through much worse, which inspires me, and gives me confidence.” (AA)</p> <p>“The work is still hard to do even with support.” (AA)</p> <p>“We all love each other, I consider Marissa my SL sissy” (CC)</p> <p>“Fid is my SL son, so our relationship is very strong” (CC)</p> <p>“More opportunity for self expression and for making connections that are more genuine” (CC)</p> <p>“Deeper understanding of people going through the same thing” (CC)</p> <p>“I have become very good friends with Willow” (CC)</p> <p>“I am very close friends with many of the regulars” (CC)</p> <p>“A few of us are close, we talk outside meetings” (CC)</p> <p>“We are now friends” (CC)</p> <p>“The others in the group are friends some closer than others” (CC)</p> <p>SL “creates a way to open up that perhaps you would not do in RL.” (CC)</p> <p>“It is not just the support group. Through the group I have met people who have given me a lot of advice on how to cope with my situation. Many have had experiences like mine and through their experience I have gained useful knowledge into what I am going through. Those are my reasons, just the ability to voice my concerns in a forum that has many people that have a lot of knowledge in regard to my situation has been helpful.” (CC)</p> |
| Connected and Understood | <p>“I usually hear what I need to” (AA)</p> <p>“I am not alone” (AA)</p> <p>“We are all alkies” (AA)</p> <p>“Fellow members” (AA)</p> <p>“It functions the same way a group in RL does.” (AA)</p> <p>“I see my thoughts. I listen to others.” (AA)</p> <p>“Hearing other people’s stories and support motivates me to do better.” (AA)</p> <p>I appreciate “someone responding to my request for someone to talk to.” (AA)</p> <p>“The honesty, openness, and willingness of the other people, also the availability of meetings, every day of the week, at least two and sometimes more meetings.” (AA)</p> <p>“It makes a huge difference to speak with those who totally understand.” (CC)</p> <p>“The people involved: It’s a wonderful, loving community.” (CC)</p> |

Table 2 (Continued)

Theme 2: Relationship Development in Second Life Social Support Groups

| | |
|---|---|
| | We have “a fantastic facilitator. She can pick up on things very fast. She has been a huge help to me to stay on track; That it is okay to take care of me, so I can keep taking care of others.” (CC) |
| Emotional | “Emotional involvement” (AA) |
| Involvement | “Any AA meeting or reading makes me feel better, so it was great when I found out AA was here.” (AA) |
| | The “first time I came to an AA group here, I cried. It was so much like the meetings that I hadn’t been able to go to.” (AA) |
| | “Once I realized AA was available in SL I RAN to it!” (AA) |
| | “Honesty, openness and willingness of the other people” (AA) |
| | “Willing to deal with the tough stuff” (AA) |
| | “Talk about deeper issues” (AA) |
| | “We are doing some deep work, I wouldn’t do this in a RL group” (AA) |
| | “Things I can talk about here that I can’t talk about in F2F groups” (AA) |
| | “People care and feel free to share.” (AA) |
| | “The feelings I get after a meeting” (AA) |
| | “Basic respect of all members” (AA) |
| | “People are more available in SL” (AA) |
| | “The SL group helps me deal with SL issues as well as RL issues, which is crucial for me since SL is such a big part of my life and the issues in SL are quite real. RL face-to-face groups can’t and don’t do that.” (AA) |
| | “I fell deeply in love in here and it drove both of us to distraction. Only in SL AA can that issue be addressed on the level I needed to find balance again. SL relationships are known for their intensity.” (AA) |
| | “The support” (CC) |
| | “We help each other” (CC) |
| | “I have met a lot of people who have given me a lot of advice on how to cope with my situation” (CC) |
| | “It is not easy to describe my feelings in regard to my mother’s condition and the group has helped me with that.” (CC) |
| | “Eleven years ago when I lost my Dad to cancer [I attended RL meetings]. I lost my SL partner of 3 years [to cancer] just 3 weeks ago. For 2 years I have come to the SL support group because our relationship was in SL, and I miss him incredibly.” (CC) |
| Disadvantages of Relationship Development in Second Life Social Support Groups | |
| | “Lack of face-to-face interactions” (AA) |
| | “There is an obvious difference between hiding behind a simulated world and talking to people face-to-face.” (AA) |
| | “I don’t know people as well as I do in RL.” (AA) |
| | “I barely know them.” (AA) |
| | “I wouldn’t consider them friends.” (AA) |

Table 2 (Continued)

Theme 2: Relationship Development in Second Life Social Support Groups

- “We all have a common goal and that is all there is to our relationships.” (AA)
“My inability to trust makes me skeptical.” (AA)
“‘Getting real’ is not a salient point of SL.” (AA)
“More said in a RL environment.” (AA)
“You have to disregard your sense of disbelief.” (AA)
“I am not feeling very positive about SL. My trust level is down.” (AA)

Abbreviations: AA = Alcoholics Anonymous; CC = Cancer Caregivers; SL = Second Life; RL = Real Life; F2F = Face-to-Face; IMing = Instant Messaging

else added the couches. [We are] trying to make it look less like a waiting room, warming it up so that the caregiver and survivor can come and get away for a bit, and be taken care of for a bit by others.” “I like it a lot better now that we changed where we meet. The pillows are better than the chairs.”

Avatars: Respondents also note that avatars facilitate their communication. “Seeing other AVs [avatars] and knowing they are connected to real folks, you let yourself become immersed. . . . It becomes as if you are there with other folks.” “There is something better about talking to an online avatar, it resembles a person more so than plain text on a forum type discussion, it adds that little bit of extra dimension.” It “feels like a real person to me.” It is “truly different to meet face-to-face even when those faces aren’t real.” “It’s nice to see who is speaking, even if it’s not their true face. It gives you something other than the typed word.”

Real-Time, Nearly Synchronous: The real-time, nearly synchronous communication facilitates the interaction. One participant commented that “it is the ‘in real time’ communication” that is important. Another noted that communication in the meetings is “very accurate to what a real [face-to-face AA] meeting would be like.” Another is “surprised to see how alike they are.” The conversational expectations concomitant with nearly synchronous communication can be a disadvantage as well. Respondents in both groups identify the computer “lag” that sometimes occurs when *Second Life* falls behind during text-chat causing messages to show up long after they have been typed and the inability to physically touch someone as annoying.

Convenient, Accessible Connectivity: Participants remark on the “convenience” of SL meetings: “We are from all over the place, but can all meet at the same time and same place in SL.” “It’s easier to get to,” especially when “getting away for a meeting [in RL] can be nearly impossible.” “I can go to one of the AA Groups here at any time of day or night and call out and someone will be there to talk to.” There is “someone responding to my request for someone to talk to.” “I have tried using hot lines. I have tried calling for help. When I have reached out for help, sometimes in RL no one was there. In SL I can let folks know that I need to talk to someone and 10 people will respond.”

Text-Based: The text-based nature of the *Second Life* groups is both an advantage and a disadvantage. One participant indicated “I am better at writing my feelings than speaking them out loud.” Others, however, pointed out that it is “dependent on the ability to communicate in text,” “I [would] benefit from hearing more,” “It’s more like reading about a meeting than being in one,” and complained about an “inability to keep attention on the letters written,” the “slowness of the meeting because of typing,” “the lack of sound,” and that “there is no voice.”

Comparison to Online Discussion Boards: Participants responded that “forums online were too impersonal.” They “were rather useless for me. They did not keep up. Often posts were a week apart.” “There was no sense of community or family.” “People are more available in SL than on the forums.” “SL gives just enough personality.” “You feel like you are there.” “There is more opportunity for self-expression and for making connections that are more genuine.” “It does feel more real than just discussion boards.” There is “less of a chance of misunderstanding and there is a lack of attitude from younger people and newer members here than in e-boards or f2f meetings.” “In e-boards and e-groups flame wars can break out. Here we don’t have that.”

Comparison to Face-to-Face Groups: “The truly big difference with the SL group from the RL is the anonymity. You don’t have to worry about being recognized.” “I live in a small town and there are a few things I can talk about here that I can’t talk about in f2f groups.” There is “less give and take (unless you are also IMing people), no facial expression, otherwise, not much [different].” “It’s easier to get to and more open in some ways. People talk about deeper issues than in RL meetings. Plus, using IMs you can get deeper insights into someone else’s similar issues. We are doing some deep work. I wouldn’t do this in a RL group.” “Recently I have been sick and not able to get out as much. The SL AA group provides me almost the same continuity as my home group in RL does. People get to know you, ask you how you’re doing, really want to know, and provide a really close family here.”

Relationship Development in *Second Life* Social Support Groups

Family, Friends, and Community: Participants develop strong interpersonal relationships in their social support groups. Cancer Caregiver members indicate that: “we all love each other, I consider Marissa my SL sissy,” “I am very close friends with many of the regulars,” “we talk outside meetings.” Alcoholics Anonymous participant comments range from: “I have best friends in that group,” “I feel like we are a community,” and “family really,” to less positive expressions of: “I barely know them” and “I wouldn’t consider them friends.” However, even these respondents show a respect for the other group members, describing them as “dedicated” and “admired,” and saying: “I am able to talk to and with others who are also alcoholics and they help me make it through another day sober.” “I get to meet people from all over the world, and with all different interests, persuasions, and beliefs. I couldn’t do that in RL.” “I go to meetings with people from Japan, Germany, UK, all willing to be present and ‘there’ for me and for each other.” *Second Life* “creates a way to open

up that perhaps you would not do in RL.” “I get a deeper understanding of different topics, basic human needs to be seen, heard, understood, appreciated, known, across barriers of worlds.” “Meeting people across the globe offers a much more satisfying experience than being around people who are more likely [similar] to my upbringing and experiences in real life.” “It [has] opened my eyes to very different experiences relating to one shared problem. I feel like I am not alone in the problem and can see that others have gone through much worse, which inspires me, and gives me confidence.” “It is not just the support group. Through the group I have met people who have given me a lot of advice on how to cope with my situation. Many have had experiences like mine and through their experience I have gained useful knowledge into what I am going through. Those are my reasons, just the ability to voice my concerns in a forum that has many people that have a lot of knowledge in regard to my situation has been helpful.” “The work is still hard to do even with support.”

Connected and Understood: “Hearing other people’s stories and support motivates me to do better.” “The honesty, openness, and willingness of the other people, also the availability of meetings, every day of the week, at least two and sometimes more meetings.” “It makes a huge difference to speak with those who totally understand.” “The people involved: It’s a wonderful, loving community.” We have “a fantastic facilitator. She can pick up on things very fast. She has been a huge help to me to stay on track: That it is okay to take care of me, so I can keep taking care of others.”

A couple of AA group members comment that: “my inability to trust makes me skeptical,” “getting real is not a salient point of SL,” and “there is an obvious difference between hiding behind a simulated world and talking to people face to face.” However, others express connectedness and understanding: “I usually hear what I need to.” “I am not alone.” “It functions the same way a group in RL does.” “I see my thoughts. I listen to others.”

Emotional Involvement: Cancer Caregiver members note: “It is not easy to describe my feelings in regard to my mother’s [cancer] condition and the group has helped me with that.” “We help each other.” Alcoholics Anonymous members comment that “[we] talk about deeper issues,” “personal feelings, experience, and outcome,” “we are doing some deep work; I wouldn’t do this in a real life group,” and “[there are] things I can talk about here that I can’t talk about in face-to-face groups.” Although one AA member stated that “I am not feeling positive about SL in general, my trust level is way down,” in general, a depth of emotional involvement and social support was described by both AA and Cancer Caregiver group members: “Once I realized AA was available in SL I RAN to it!” “Any kind of AA meeting or reading makes me feel better, so it was great when I found out AA was here.” The “first time I came to an AA group here, I cried. It was so much like the meetings that I hadn’t been able to go to.” “The SL group helps me deal with SL issues as well as RL issues, which is crucial for me since SL is such a big part of my life and the issues in SL are quite real. RL face-to-face groups can’t and don’t do that.” “I fell deeply in love in here and it drove both of us to distraction. Only in SL AA can that issue be addressed on the level I needed to find balance again. SL relationships are known

for their intensity.” “Eleven years ago when I lost my Dad to cancer [I attended face-to-face meetings]. I lost my SL partner of 3 years [to cancer] just 3 weeks ago. For 2 years I have come to the SL support group because our relationship was in SL, and I miss him incredibly.”

Discussion

Participants describe *Second Life* as a communication medium in which they can build interpersonal relationships that differ from those developed in online, text-based discussion forums and face-to-face social support groups. Their evaluation of each communication medium explains why respondents choose to participate in *Second Life* social support groups. Their descriptions of their *Second Life* social support group relationships generate implications for the hyperpersonal perspective.

Second Life as a Communication Medium

Text-based, Avatar-to-Avatar Communication: The lack of voice communication is troublesome for some participants who identify this as what they like least about their *Second Life* social support group. They note that the text-based nature of the group allows only so much to be done during a 1-hour meeting and computer lag sometimes disrupts their group’s communication. In addition, the medium poses an obstacle for those who miss the physical touch available in face-to-face meetings. Despite these limitations imposed by text, computer lag, and lack of physical touch, however, participants express a sense of social connection created by their avatars. Alcoholics Anonymous group members identify avatars with the people behind the computers, and appreciate seeing, touching, and communicating with these people through their avatars. A Cancer Caregiver member comments that it is better talking to an avatar and that it adds a dimension to the communication relationship.

Real-Time, Nearly synchronous: The text-based messages used by these *Second Life* social support groups are composed and edited before they are expressed, maintaining a greater degree of communicator control over the message than typical in face-to-face conversation, but the group meetings are similar to face-to-face meetings in their interactivity. The nearly synchronous communication allows participants time to craft, edit, and rewrite their text-based messages before communicating them, but provides a real-time, interactive conversation and feedback that facilitates group synchronization. Meetings are held at a specific time each week in a familiar virtual location. During meetings participants engage in real-time conversation, allowing more spontaneous communication and greater expressions of social support than they experience in the asynchronous communication of online, text-based, discussion forums.

Convenient, Accessible Connectivity: Getting to a face-to-face meeting can be difficult for a Cancer Caregiver when a family member is sick and needs attention. An

AA member may not have a driver's license or may live too far away to easily attend a face-to-face meeting. *Second Life* provides access to meetings from home and a greater opportunity for social support late at night when needed. Other forms of CMC, such as bulletin board forums, provide late-night access, but only asynchronously with no guarantee anyone will answer in a timely manner. As one participant notes: There is almost always someone around in *Second Life* and transportation is never an issue.

Relationship Development

Family, Friends, and Community: Cancer Caregiver group members comment on the love, deep understanding, and close friendships they develop in the group. Alcoholics Anonymous members describe their group as family, best friends, loving community, admired others, and dedicated people. Participants see themselves as connected to each other in close relationships.

Connected and Understood: Members of the two groups differ some in the kinds of relationships they develop. The AA group members hear what they need to hear from their fellow members, and feel like they are not alone. Alcoholics Anonymous focuses on the control of alcoholism as a disease and promotes the idea of personal responsibility (Wright, 1997). Individuals are responsible for keeping themselves sober, but join the group to help battle that personal disease. Members of AA share a commonality of purpose. The Cancer Caregivers focus on coping with the often uncontrollable processes and consequences of cancer. Cancer Caregiver members identify the importance of friendship and the understanding of others who are going through similar experiences. Someone who understands what a person is feeling is valuable to an individual who cannot change their situation and must deal with it (Wright, 2002b). Cancer Caregiver members show a desire for emotional support, expressions of comfort, and a sense of being cared for by others (Robinson & Turner, 2003). Members of both groups feel connected and understood.

Emotional Involvement: The AA members note that people in *Second Life* are “willing to deal with the tough stuff” and to “talk about deeper issues.” Cancer Caregiver members appreciate that the group allows them to open up and blow off steam. They note how they love each other, help each other, and are genuine. Respondents of both groups are satisfied with the emotional support they receive and the depth of their emotional involvement is evident in the feelings and respect they express for members of the group. Even so, their friendships typically remain online. One Cancer Caregiver member mentions speaking to other members via voice chat and an AA member notes chatting with other members in *Second Life* outside of group meetings. No members, however, indicate meeting with other group members outside of *Second Life*. This appears to be typical of CMC social support groups. Wright (1999) writes that “most people who have self-disclosed deeply personal information under the cloak of anonymity would find it difficult to develop supportive relationships in the face-to-face context” (p. 410).

Why People Participate in *Second Life* Social Support Groups

Past research has indicated that the major advantages of participating in a CMC social support group reside in the text-based, anonymous, asynchronous, convenient, accessible communication within a weak-tie network of similar others that requires few personal resources while maintaining personal control over the interaction. (See Table 1.) *Second Life* provides a type of text-based, anonymous, and accessible communication, but places some caveats on the asynchronous, convenience, and personal control aspects of that interaction.

Hyperpersonal Relationships

Walther (1996) argues that the reduced social cues and asynchronicity of text-based communication in CMC offers the potential for hyperpersonal interaction. Reduced social cues mean the absence of physicality and a lack of any contradictory prior relational knowledge. This combination permits a selective self presentation. Reduced cues also allow a cognitive reallocation toward conversational planning. In addition, the asynchronous, text-based communication means participants can review their discourse and take part in the group discussion at times of their convenience. Individuals can make discretionary choices about their task and social exchanges within the group. Together these influences precipitate a hyperpersonal intensification in the communication and relationship development (Walther, 1996; Turner, Grube, & Meyers, 2001).

Wright and Bell (2003) show that hyperpersonal interactions occur in CMC social support groups that positively affect participant perceptions of their fellow group members as more expert, similar to themselves, better listeners, more understanding, and more emotionally supportive than family or real-life friends. These attributes produce impressions of group members as closer friends and, consequently, increase relational satisfaction (Turner, Grube, & Meyers, 2001; Wright & Bell, 2003). The present respondents comment, with some surprise, on the depth of the personal relationships they develop.

Hyperpersonal Relationships in *Second Life*

The real-time, nearly synchronous communication of the *Second Life* group meetings does not afford individuals the same convenience of access or personal control over timing in their communication and participation that more asynchronous CMC forums offer. Social support group participants do not have the same amount of preparation time available in *Second Life* as those using a fully asynchronous online, text-based, discussion forum; but *Second Life* participants can plan and prepare their text-based messages more carefully and mindfully than members of face-to-face conversations. The nearly synchronous communication allows discourse planning while also providing an interactivity, stimulating a conversational feedback loop, and maintaining group synchronization. Participants express appreciation for the nearly synchronous, real-time communication and feedback characteristics of

Second Life social support groups rather than for the ability to edit and control that communication.

Other characteristics of *Second Life* also affect relationship development as well. The embodiment of the other person as an avatar provides an enhanced visual presentation and the presence of time and space adds a relational dimension. Sitting near a person in virtual space and being available to chat interpersonally outside of the meeting time communicate relational intent and can enhance relationship development (Antonijevic, 2008).

Walther (1996) argues that “all encounters begin with stereotypical first impressions” (p. 30). In *Second Life* first impressions are created by an avatar rather than by a person’s physical body. Physical cues are replaced by a virtual embodied presence that interacts interpersonally within a symbolically constructed social reality. Virtually embodied cues are available in *Second Life* that might more accurately be termed alternative social cues than reduced ones. Appearance and action represent choices made by a participant and carry social information. This represents a social presentation of self that is distinct from the reduced embodiment found in online, text-based, discussion forums. An attractive avatar who sits nearby, stays after a meeting to chat privately, and is online and available at other times, can stimulate a hyperpersonal relationship in a way that an asynchronous text-based comment in a discussion forum may not.

In 1996 Walther, understandably, was unable to predict the effect of these combined influences on the development of hyperpersonal communication in a virtual reality. He, however, perceptively raised the question of whether real-time virtual reality would enhance feelings of intimacy and hyperpersonalness, or if “less is more” in the influence of reduced cues and synchronicity on hyperpersonal relationship development (Walther, 1996, p. 30). The present results provide an answer to that question. Respondents indicate that the nearly synchronous communication of *Second Life* is more conducive to their relationship development than either the fully synchronous communication of face-to-face groups or the more asynchronous communication of online, text-based, discussion forums.

The present results indicate that communication synchronicity and availability of social cues are more complex influences than can be represented in their presence or absence. The synchronicity of communication and availability of social cues might best be thought of as multidimensional rather than as either present in face-to-face communication and reduced in CMC. This conclusion calls for a reassessment of the influences on CMC hyperpersonal relationship development. Participants prefer the real-time, nearly synchronous communication of *Second Life* social support groups that provides multiple alternative social cues in the impressions made by avatars communicating in virtual time and space. They prefer this nearly synchronous communication environment with virtual social cues more than the asynchronous communication of online, text-based discussion forums that allow greater message preparation time and personal control or than the fully-synchronous communication of face-to-face group meetings that provides more physical social cues.

Conclusions

Second Life provides greater anonymity than face-to-face meetings and its nearly synchronous communication surpasses the interactive potential of online discussion forums. The representation of participants as avatars maintains personal anonymity while providing a symbolic visual presentation that enhances interpersonal relationship development. Through their avatars and asynchronous messaging individuals maintain control over self presentation but in this medium they are able to participate in real-time synchronous group meetings as well. Together these influences stimulate hyperpersonal relationship development. The present analysis provides an answer to Walther's (1996) question. For synchronicity and social cues: Less is not more. The nearly synchronous real-time communication of *Second Life* enhances participant feelings of intimacy and hyperpersonalness more than either fully synchronous or asynchronous forms of communication. Social cues are not either present or reduced, but substituted in symbolic ways that are socially revealing and relationally influential. This analysis delinks the presence of social cues from personal anonymity, demonstrating that they need not be inversely related. *Second Life* participants can remain anonymous even while revealing social cues through their avatars.

The nearly synchronous communication, social cues of avatars interacting in a visual space, and anonymous connectivity to a large network of similar others, together provide a medium conducive to the communication of social support and relationship development. Respondents choose to participate in *Second Life* social support groups because through that communication medium they can develop intimate, hyperpersonal relationships with people who care about them and who help them cope with their stressful life circumstances.

Limitations of Study and Suggestions for Future Research

The present study is limited by its sample of 23 individuals selected from only two types of social support groups that meet in *Second Life*. It is further limited by its sampling of respondents during a specific 3-month period of time. However, future research can build on these preliminary results by interviewing participants in other types of social support groups and sampling them over a longer time period. A longer study could compare the perceptions of those new to *Second Life* with those who have participated for many months or years and with those who are thinking about leaving *Second Life*. In addition, most *Second Life* communication is currently text based and most *Second Life* social support groups currently use text to communicate, but a few use voice. Future research might compare *Second Life* social support groups that use text-based communication with those that use voice. Changing from text to voice will affect the anonymity and synchronicity aspects of participant communication and relationship development. These types of future studies will help to further identify and interpret the complex influences on hyperpersonal relationship development in *Second Life* social support groups.

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