Online Virtual Community Experience of Chinese Middle-aged and Elderly People



MA Thesis of New Media and Digital Culture

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Introduction

When new media is mentioned, it usually refers to the youth-oriented culture. However, with the popularity of high-speed internet, new media becomes more accessible to a wider audience. Middle-aged and elderly people are no longer "traditional media audiences." They gradually become "immigrants" to new media, adding to the enjoyment of their lives in a new way.

According to the 35th Statistical Survey Report on the Internet Development in China, to December 2014, internet users in China had reached 649 million, and the new internet users of 2014 numbered more than 30 million.¹ Among them, the proportion of internet users over the age of 40 increased while the proportion of internet users below the age of 19 declined. The report points out that there are two reasons for the increase in the proportion of the middle-aged and elderly internet users. One reason is that the popularity of the accessibility to the internet provides more chances for middle-aged and elderly people in China to access the internet. The other reason is that the aging population makes young internet users of the past become the present middle-aged and elderly internet users. It can be said that both reasons mentioned above have an impact on the aging trend of the internet users' age structure.

Elderly people are a very important group of media users. On one hand, elderly people have more leisure time; on the other hand, the channels for elderly people to participate in social activities are gradually reduced.² Since humans are among the most social of animals, individuals need to communicate with each other no matter what ages they are (Charness & Holley, 2004). Aging is a social process as well as a physiological and psychological one, so from the communicative perspective, Graney (1975) and Nussbaum et al. (1989) state that social participation through communications is especially important to elderly individuals since it is essential for elderly individuals to maintain their quality of life.

Many communication scholars have proposed that the traditional media is used as a substitute for interpersonal contact and participation (Graney & Graney, 1974; Turow, 1974; Wenner, 1976; Bierig & Dimmick, 1979) and as information

¹ "35th Statistical Survey Report on the Internet Development in China," China Internet Information Center. January 2015. Available at: www.cnnic.cn

² When New Media Meet Population Aging. Overseas Edition of People's Daily. July 23, 2015.

sources for social interaction (Danowski, 1975; Bleise, 1982) by elderly people. However, with the popularity of the high-speed internet, nowadays, new media offers a new way for elderly people to make interpersonal contact and participate in social interaction. Lohr (2003) states that when asked to describe new media, most people refer almost instantly to the internet. Online virtual communities have become very popular internet applications. According to a statistical survey report issued by the China Internet Network Information Centre in July 2010, about half of internet users have used online communities.³ In today's information society, the older individuals have been given access to various new communication media. Today, not only do the young people actively participate in online virtual communities, but middle-aged and elderly individuals in China also enjoy being part of these new communities. Through online virtual community, middle-aged and elderly people can enjoy their lives in a new way, constructing real human relationships in a virtual world.

Several studies have investigated elderly people's social interactions in online settings. Wright (2000) finds that Internet network enables older people to develop social ties that build friendship not only with other elderly people, but with individuals of different generations as well, which enables older adults to feel more integrated into society. Kanayama (2003) investigated a text-based online community for Japanese elderly people with a focus on self-disclosure and the exchange of social support. She finds that via text-based computer-mediated communication, supportive and companionship relationships can be established between older adults in the online community. Besides, many studies show that people exchange both informational and emotional support in online support communities (Pfeil and Zaphiris, 2007; Preece, 1998, 2000). Pfeil et al. (2009) find that older adults' perception of social support in online settings is different in comparison to their physical experiences. On one hand, it is more difficult and time-consuming to establish trust with other people in online settings compared to offline settings; on the other hand, in online settings people are more honest when talking about themselves due to the anonymity and the fact that people do not have to face the other person directly when writing a message.

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³ "26th Statistical Survey Report on the Internet Development in China," China Internet Information Center. July 2010. Available at: www.cnnic.cn

However, most of these studies were conducted in text-based online settings and in developed countries. China is a developing country. On the one hand, the Internet penetration rate in China is far behind developed countries, on the other hand, the average educational level of Chinese middle-aged and elderly population is far behind the people in developed countries. Many Chinese middle-aged and elderly people don't know the *pinyin* system, 4 and don't know how to type Chinese characters in the computer, so text-based online communities are not as popular in China among middle-aged and elderly population as those in developed countries. That is why, in the past, few studies have payed attention to Chinese middle-aged and elderly people's online community experience or have explored how online communities influence the Chinese middle-aged and elderly people's daily lives. However, with the development of technologies, online social interactions are no longer limited to text-based computer-mediated communications. Real-time audio and video offer Chinese middle-aged and elderly people a new way to communicate with each other online and help them develop their social ties in the virtual community. Compared to the traditional text-based online virtual communities, I found that the type of construction of relationships in audiovisual-based online virtual communities was a bit different than that in text-based online virtual communities. Many studies have shown that the supportive relationship is established among older adults in text-based online virtual communities. However, in my study, no supportive relationship is built among members in an audiovisual-based online virtual community -- instead, in the 51VV video community, a new teacher-student relationship is constructed among middle-aged and elderly people. In addition, I found that for the construction of friendship relationship, though people can see each other via real-time video in an audiovisual-based virtual community, due to the anonymity by not disclosing real names, people are more courageous to talk about themselves to others. This finding is also a bit different than what Pfeil et al. (2009) conclude based on the text-based online virtual community. Based on these reasons, this paper is a call for further virtual community studies in China, complementing the blank space of existing research studies on Chinese middle-aged and elderly people's online virtual community experience.

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⁴ Pinyin is the official romanization system for Standard Chinese in China.

This paper will use langsong⁵ as an example for exploring how Chinese middle-aged and elderly people expand their interests form the physical world into a virtual world through new media, constructing social relationships in an audiovisual-based online virtual community -- the 51VV video community. The paper will be divided into seven parts. Part one is the literature review which discusses the term "virtual community," and it reviews the importance of the "sense of community" - the feeling of belonging and attachment to a virtual community that members develop and enjoy. Part two briefly introduces the 51VV video community. Part three illustrates the method of "virtual ethnography" which is used in this research, and it discusses the methodological concerns that should be considered when applying virtual ethnography to research a virtual community. Part four uses Kelman's social influence theory, analyzing what factors influence an individual's motivations to participate in a virtual community. Part five describes how middle-aged and elderly people share their interests and perform in a virtual community. Part six states how middle-aged and elderly people present themselves in a virtual community. Part seven illustrates how middle-aged and elderly people interact with each other and construct social relationships in a virtual community.

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⁵ Langsong is a creative activity, which transfers literary works into audible language. It is a language art in which people use a clear and loud voice, combining with a variety of language skills, to express thoughts and feelings about the work. The literary works of *langsong* are general poems, prose, and novels.

1. Literature review: virtual community and the sense of community

Online virtual communities have existed on the internet for more than 30 years. The WELL (Whole Earth 'Lectronic Link), which started in 1985, is widely known as the first virtual community on the internet. It was an electronic online community for conversation and discussion covering a wide variety of subjects, including computers and communications; body, mind, and health; arts and recreation, etc. (Ellis et al., 2004). Rheingold was one of the very early users of the WELL (ibid.), and the term "virtual community" was first coined by him on the WELL. Rheingold defines virtual communities as "social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (Rheingold, 1994, p. 5). The "sufficient human feeling" mentioned by Rheingold is actually the sense of virtual community. It is based on the physical equivalent sense of community, in which members can experience a feeling of belonging to an online social group (Abfalter et al., 2011; Tonteri et al., 2011).

Traditionally, the term "community" is likened to a geographic area, which is based on geographical proximity and physical presence (Hillery, 1955; Wellman & Gulia, 1999b). It arises from people's needs, creating a space in which individuals can share their sorrow and joy or lean on their communities in times of need (Chavis & Wandersman, 1990). Dependent on changes in the nature of the community, the focus of the definition of the term "community" evolves in meaning from spatial proximity and physical attributes to communication, social cohesion, and common values (Wellman, 1988). This change is then reflected in the emergence of the virtual community. Handy (1995) demonstrates that when the word "virtual" is added to the term "community," the "virtual" part of the term "virtual community" indicates that the physical place is no longer the essence of the community. Rather, "the spirit of the community" among networks of people becomes more important than the sense of place, and the interpersonal relationships and interactions are crucial components in the creation of the community (Wellman, 1988; Ward, 1999). No matter if we speak of an offline physical community or an

⁶ The Well: http://www.well.com/aboutwell.html

⁷ Ibid.

online virtual community, "the spirit of the community" is the crucial element bringing people together for participating with each other in the community. It is a "spirit of belonging together" (Abfalter et al., 2011), which creates a "place" where members can share "social relations marked by mutuality and emotional bonds" (Bender, 1978), and experience a sense of belonging to a community. Online virtual communities overcome limitations of synchronousness, physical proximity, and spatial cohesiveness needed for physical face-to-face interaction, and are successful in helping individuals obtain a sense of belonging to a community in a virtual environment. In contrast to participants of a physical community, members of online virtual communities need not be physically collocated. Therefore, technology is used as the primary conduit of communication in online virtual communities (Chu, 2009). Computer-mediated communication is the basic technology used to construct the virtual community (Kanayama, 2003). Jones (1995) states that it is not only a tool that participants use to inhabit the virtual community, but also a medium through which social relations are constructed in the virtual community.

The studies about social interaction in online virtual communities in early stages were mainly based on text-based virtual communities. However, with developments in technology, the forms of virtual communities are no longer limited to text-based discussion forums or mailing lists. Nowadays, there are also many audiovisual-based virtual communities, where people can share their personally produced audio or video creations to other community members, or present themselves to other community members via real-time audio or video. Rotman et al. (2009) conducted a research on YouTube, investigating whether users have a "sense of community" towards YouTube. They found that though YouTube is a web-based video sharing platform, the actual interactions between users are sufficient for users to form a feeling of belonging and attachment to the amorphous community. That is why YouTube itself is considered to be an online community for many users.

The literature reviews mentioned above reveal that types of virtual communities can vary, and that they have evolved over time influenced by developments in internet technology. Additionally, the "sense of community" is critical for determining whether an online setting can be defined as an online

community, as it is a crucial element for people to feel they "belong" and therefore participate in the community.

2. 51VV video community

51VV video community is one of the most popular online video communities in China. It was developed by Beijing Youbei Online Network Technology Co., Ltd, and it offers users its multi-person interactive video entertainment platform, featuring services such as instant messaging, online karaoke, and video chat. Individuals interested in participating in the 51VV video community can utilize these services to create personalized content for the purpose of communicating with each other and for sharing their interests with other community members. 51VV video community has different kinds of chat rooms with different topics, such as singing, dancing, and langsong, etc. Each room has three video channels, where three of the community members can show themselves via real-time online videos to other room members simultaneously. In addition, via an instant messaging function, individuals can make public comments, including sending virtual gifts to the members who are making performances on the video. They can also chat to a specified room member in a private conversation through text messages, audio chat, or video chat. Compared to "traditional" text-based virtual communities, the activities of participants in the 51VV video community are not limited to discussions about a specific subject of the participant's interest. Rather, sharing interests via audio or video to all community members, or presenting their talents through real-time audio or video might be more important to them than discussing a specific topic.

3. Method

This study will mainly utilize virtual ethnographic research collected via participant observations and interviews. Ethnographic research basically includes observations and interviews held with individuals and other related people to describe or explain their everyday experiences (Firat & Yurdakul, 2011). Since a virtual community is a collection of human performances and interactions utilizing technology within a cultural context of immense magnitude and complex scope, various studies have illustrated that using ethnography as a research method can be appropriately used for studying the virtual community (Markham, 1998; Fox and Roberts, 1999).

Specifically, the method of ethnographic research being used to study the virtual community is virtual ethnography. Virtual ethnography refers to an ethnographic research approach that is carried out in online settings, such as on the Internet and/or within online communities, etc.⁸ It has been termed differently by various researchers and different disciplines, such as digital ethnography, online ethnography, and cyber ethnography, etc. (Domínguez et al, 2007). Among them, one of the most popular terms is coined by Robert Kozinets. He combines the words "internet" and "ethnography" to come up with "netnography" (Kozinets, 2010), describing it as "ethnography conducted on the Internet; a qualitative, interpretive research methodology that adapts the traditional, in-person ethnographic research techniques of anthropology to the study of online cultures and communities formed through computer-mediated communications" (Kozinets, 2006, p. 135). His concise description of netnography well explains the definition of "virtual ethnography." If the term "internet," as used in the description of "netnography" is changed to the term "cyberspace" or "online community," the definition of netnography proposed by Kozinets can also be adapted as "cyber ethnography" or "online ethnography." Domínguez et al (2007) state that each of the terms related to virtual ethnography "maintains its own dialogue with the established tradition of ethnography and formulates its relation to this tradition in different ways." Because the purpose of this study is to understand Chinese middle-aged and elderly individuals' lives in a virtual community, it employs

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⁸ Virtual Ethnography: https://sites.google.com/site/virtualethnography/about_pathfinder

virtual ethnography to explore an online virtual video community to seek answers to the following research questions led by the literature review.

Research Question 1: How do middle-aged and elderly people share their interests and perform in a virtual community?

Research Question 2: How do middle-aged and elderly people present themselves in a virtual community?

Research Question 3: How do middle-aged and elderly people interact with each other and construct social relationships in a virtual community?

3.1 Discussions of ethnography in the virtual community

Kanayama conducted ethnographic research in 2003 studying elderly Japanese people's experiences in an email-based online virtual community. She argued that there were three primary methodological concerns requiring consideration when applying ethnographic methods to study a virtual community (Kanayama, 2003). First, she states that most behaviors and actions of individuals in a virtual community are inscribed only as visible discourses (ibid.). Meanwhile, Fox and Roberts (1999) argue that when applying the method of ethnographic research to study a text-based virtual community, there is much ambiguity over the validity of the participant's representations of a setting and the interpretation of those representations in written descriptions. This issue also merits attention when analyzing individuals' behaviors and actions in a video-based virtual community. Using online ethnography to analyze people's behaviors and psychological activities will be more difficult and complicated for researchers than analyses performed in a traditional study. Second, there are always those who remain silent in a virtual community, called "lurkers" (Kanayama, 2003). As lurkers are also a type of participant in the virtual community, their existence cannot be ignored. So how the researcher observes lurkers' presentations and their psychological effects on other non-lurker participants in a virtual community raises an issue that is worth being discussed (Lindlof and Shatzer, 1998). Third, Kanayama (2003) illustrates that the presence of the researcher in participant observation in the virtual community is a critical issue. The researcher can participate in a virtual community in a variety of ways: as a non-participant (such as in the case of researching an

archival discourse), a lurker (non-active participation), or an active participant. Therefore, the researcher needs to decide by which identity they will be represented while studying that particular virtual community. If the researcher decides to participate in a virtual community as an active participant, the ethical disclosure of the researcher's identity may lead to the researcher bias with a consequential loss of validity (Fax and Roberts, 1999). However, if the researcher participates in a virtual community as a non-participant or a lurker, they may not be trusted by other participants in the virtual community and their behavior may be thought of as invading other participants' privacies.

The three methodological concerns discussed above are also what I must face and consider in my study. However, at present, there are no standard guidelines about what kind of identity the researcher should use to participate in a virtual community, or how much permission should be obtained from participants when making research. When considering the protection of participants' privacy, one should not present identifying information of participants in the result of the research, such as their real names -- which should be common sense.

3.2 Participant observation in 51VV video community

This study was conducted in the *langsong* room of the 51VV video community to understand how Chinese middle-aged and elderly people expand their interests from the physical world into a virtual world that constructs social relationships in a virtual community. In order to observe participants' behaviors, I registered an account on the 51VV video community from February 2016 and made observations of participants for 3 months. The *langsong* room of the 51VV video community comprised approximately 220 members when this study was conducted. Among them, about 100 members were active participants. The 51VV video community is not a virtual community specific to elderly. Everyone who wants to participate in a particular room can register as a member. When I make participant observations in efforts to understand middle-aged and elderly people's online experience in the 51VV video community, my participation might also make me become the research object of other people's study.

In this participant observation study, I assumed a position of a non-active participant. I presented myself twice (once a week) to all room members via real-time video by performing two Chinese contemporary poems in the first half month. Then, I contacted one of the room administrators and clearly told her my personal background and my purpose about why I participate in this community. In the remaining two and one-half months, I participated in two performances as a volunteer. I assisted the administrator team in managing the "microphone sequence" of the performances. So most of the active members of the *langsong* room knew me. In this way, I could obtain the trust of the community members, as well as avoid the ethical issues discussed earlier.

Since the 51VV video community is a virtual community especially for, but not limited to middle-aged and elderly people, the room members in the langsong room of the 51VV video community included both young and old. In order to accurately focus on the target group in this study, I created a questionnaire asking for the participant's age, gender, education background, occupation, and income. Additionally, I asked questions such as "how did you find out about the 51VV video community?" and "in what way does the 51VV video community have an influence on your daily life?" I thought this information could help me to understand participants' motivations and their thoughts around using the 51VV video community. All the questions I designed were open-ended questions. The advantage of open-ended questions is that the respondents are encouraged to answer questions in any way what they wish, freely sharing their own views and opinions about a particular topic (Kazi & Khalid, 2012; Williams, 2014). However, the disadvantage of using open-ended questions is that the respondents might need to a longer time frame to complete the questions, and especially so for less articulate subjects, which sometimes results in questions being left unanswered (Williams, 2014).

With the help of one of the administrators of the *langsong* room, I sent out 100 questionnaires, and received 58 valid questionnaires. In my study, the valid questionnaires were those in which all questions of the questionnaire were fully answered. Among 58 valid questionnaires, 36 questionnaires fit the requirements of this study, which means the 36 participants belonged to the group of middle-aged

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⁹ The full guestionnaire can be found on the Appendix 1.

and elderly people (aged over 40). I assumed that the ages the participants wrote on the questionnaires were real. Since the 51VV video community is an audiovisual-based virtual community, participants ae required to show their faces on the video to all community members when making performances. So there's no reason for them to lie about their ages. Among 36 middle-aged and elderly participants, 24 are females while 12 are males. That is to say, the proportion of female participants of this group is much higher than the proportion of male participants.

Then, based on participants' occupations and their answers to some specific questions of the questionnaire items, I chose 5 participants from whom I thought I could dig deeper into more interesting information from and about them, conducting semi-structured interviews with each of them individually via online telephone. I named these 5 participants as M3, M8, F5, F20, and F21, respectively. 10 Two of them were males while the other three were females. Prior to the interview, I gave each participant an outline previewing the types of questions to expect, and told them that the data would remain anonymous and confidential. During interviews, I made handwritten notes for all interviews. Compared to items on the questionnaires, which were questions mainly focusing on the basic personal information of the participants, the interview questions concentrated more on information about participants' feelings around using the 51VV video community, and also included more probing questions, seeking additional information about some of their answers they gave in the original questionnaires. The initial questionnaires helped me understand what factors influence participants' behavior when deciding to participate in this virtual community, while the follow-up interviews gave me deeper insights into what kinds of influence the 51VV video community has on participants' lives.

¹⁰ All participants' basic personal information could be found on the Appendix 2.

4. Motivations and Social Influence Theory

The online virtual community is composed of members sharing common interests. When asking "why do you participate in the *langsong* room of the 51VV video community," according to the questionnaires, almost all members say that they like *langsong* or they want to learn how to *langsong*. However, since the virtual community is a place for individuals with common interests to interact with each other, the members' behaviors may be influenced not only by their own motivations, but also by other members and the community.

Bagozzi and Lee (2002) state that one's decision-making is highly influenced by social processes. According to Kelman's (1974) social influence theory, people's behavior is influenced by three social processes, which are compliance, identification, and internalization. Compliance reflects a change in behavior in which an individual acts to comply with the opinions of others who are important to them. According to the data from the questionnaires, 80 percent of the participants say that they heard about the 51VV video community from their friends. Some of them say that they are participating because friends in their real lives recommended it to them, while some others say that they were invited to participate in the *langsong* room of 51VV video community by online friends.

In my interviews, F5 stated:

"I heard of the 51VV video community from one of my online friends. We knew each other on the GuaGua video community, a virtual community similar to the 51VV video community. My friend told me that now the 51VV online community is more popular and has more participants, so a few of my friends and I moved from the GuaGua video community to the 51 video community together."

When I asked why the 51VV video community might attract more participants, she said the following:

"The server of the 51VV video community is more advanced, so the definition of the video is higher and the video is smoother. Most importantly, the 51VV video community has three video channels, so three members can present themselves via real time online videos to all room members simultaneously. Thus, the form of the performance can be more diverse and the online experience will be more interesting."

According to the questionnaires and interviews, being influenced by a friend who has the experience of being a member of a certain virtual community is an important factor which can arouse an individual's motivation to participate in a particular virtual community.

Identification is the changing of behaviors due to the influence of someone who is popular. It reflects on an individual's identification within a community, such as the sense of belongingness and attachment (Zhou, 2011). Wellman & Gulia (1999) argue that individuals are motivated to participate in a virtual community because they want to express their identity and to receive recognition from the community, particularly because the recognition of expertise can increase one's self-esteem, respect and status (Wellman & Gulia, 1999, p. 177). In my participant observations, I found that the members of the langsong room of the 51VV video community also included some famous broadcasters. Two of the participants from questionnaires are professional broadcasters. One of them (F21) who used to work in a television station has already retired, while the other one (M2) is still working in a radio station. I interviewed the retired one. She stated that the 51VV video community compensated the sense of loss she experienced resulting from her retirement and gave her a sense of belongingness and the feeling of being needed. She said that in the 51VV video community, she could continue her "career" by sharing langsong skills with other members and instructing other members. Meanwhile, for some other members, they felt very excited to become members of the langsong room of the 51VV video community because they were attracted by those well-known broadcasters. In the physical world, ordinary individuals almost have no chance to know or to communicate with the professional broadcasters. However, in the 51VV video community, they can show themselves via real time video to all online room members, including those professional broadcasters. They can discuss langsong skills with the professional broadcasters, and even perform with them together in the 51VV video community.

F24 writes in her questionnaire: "In the 51VV video community, I can communicate and perform with big stars whom I would never have expected to perform with before. I also know a lot of friends who like *langsong* in the 51VV video community. This gives me a sense that I have found a 'big family' that belongs to me." According to questionnaires and interviews of professional broadcasters, they obtain the sense of belongingness and attachment from the sense

of being needed, recognized, and respected; for non-professional *langsong* enthusiasts, they get that sense from the feeling of self-validation and the acknowledgement from other members, especially from celebrities or experts that they might not otherwise meet in physical world.

Internalization is the process of acceptance of a set of norms established by people or groups which are influential to the individual. It reflects that an individual accepts the influence because of the congruence of their personal sense of values with those of group members (Dholakia et al., 2004). Compared with other entertainment activities that most Chinese middle-aged and elderly people like to do, such as dancing in the public square, playing chess or playing majiang or other games, langsong is considered to be elegant. Since langsong is a creative activity which transfers the literary work into the audible language, individuals who like langsong are usually well-versed in literature. So, people who enjoy langsong are often highly educated. According to the data from questionnaires, more than 70% of participants have a bachelor's degree or master's degree as their education background. In my interviews, F20 said that: "I would never dance in the public square. I'm different from them." She believes that her interest in *langsong* is more elegant. Meanwhile, she thinks that the members of the langsong room of the 51VV video community are similarly situated in the higher class of society, and that she belongs to that group. It can be inferred that, in a sense, the culture of the virtual community is more likely resembles a system of class-related meanings and symbols, and the specific norms being adhered to by the members of the virtual community are those corresponding meanings and symbols.

5. The forms of making langsong performances

It is important to understand how the members make *langsong* performances in the 51VV video community because it is important to understand how the members obtain a "sense of virtual community." The "sense of community" is important to understand the participation within a community and is identified as an important enabler for community interaction and community success (Abfalter et al., 2012). It is described as a feeling that members have of belonging to a community, a belief that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together (McMillan & Chavis, 1986; Tonteri et al., 2011). The four elements needed to feel a "sense of community" - membership, influence, integration and fulfilment of needs, and shared emotional connection, are also applied to feel a "sense of virtual community" (Blanchard, 2008; Sangwan et al., 2009). Due to the virtual community face a media-rich and playful environment, which is different to the physical community, the members' feelings of membership, identity, belonging, and attachment to a group are primarily interacted through electronic communication (Blanchard, 2007). By understanding how the members make langsong performances in the 51VV video community, it can help us know how the members share their interests, obtain the fulfillment of their needs, and sense the feelings of belonging in the 51VV video community.

As reviewed, there are three video channels in the video area in the *langsong* room (image 5-1). Three members can be supported when presenting separately in the video area, simultaneously. However, it does not mean that the three video channels must be occupied at the same time, and it also does not mean that the participant must be presented on the video when making *langsong*. Whether the participant need to show their faces on the video depends on the chosen activity forms used in the making of *langsong*.



Image 5-1: The blue area of the image is the video area, including three video channels.

The activities involved in making *langsong* can be divided into three forms: daily entertainment, public tutorial, and topic evening party.

5.1 Daily entertainment

Most of the time, the activity form of making *langsong* is the daily entertainment, which means a member can freely choose a literary work of their preference, such as a poem or prose, to perform for all room members. When making *langsong*, the member can choose to mute the video which only opens the audio channel in the video area, to set a background image at the video window, or show one's face at the video window via real time video. In general, most of the middle-aged and elderly members don't like to open real time video to show their faces when making *langsong*. Only the members who are well-dressed in the moment are willing to present themselves on the video. And usually, the age range of the members who are willing to show their faces on the video are mostly the relatively young members.

In the daily entertainment, generally, only one video channel is kept open, where the members can freely perform on it, while the other two video channels are set as occupied. This is because that each video channel has a separate waiting list. The members who want to perform need to queue up in the waiting list by clicking the button "wait for the microphone." By only keeping one video channel open, the members who click the button "wait for the microphone" can be automatically allocated to the waiting list of that opening channel by the system. Therefore, this ensures that at any one time there is only one performance presented online to all room members. Usually, when a member finishes a performance, they click the button "put down the microphone," then the next member who is in the waiting list will be directly pushed to the open video channel. However, if a member wants to perform together with other members (such as with their friends in the community) together, they can apply to the room administrators in advance. Then the room administrators will open the other one or two video channels for them, so that a member with friends can together perform one work.

Usually, in the daily entertainment, before starting to perform the work, the member who is holding the microphone will first speak a few words to make a brief greeting to all room members. The members who are the newcomers to the community will then briefly introduce themselves to all room members, and then state what work will be performed, such as:

"Hello everyone. I'm [Lucy] (the member's nickname in the community is usually used). I'm the newcomer in this community. I'll perform a poem of Pushkin 'If by life you were deceived' for everyone. Hope you guys will like it."

For the members who are the regulars in the community, since most of the active members already know them, they will generally directly introduce the work of what they will perform for the room members, such as:

"Good evening, everyone. Today, I'll share a poem by ShuTing 'To the oak' for you guys. Hope everyone will like it."

When a member finishes the performance, they will say "thanks" to all room members. When they put down their microphone, the next participant who is waiting on the waiting list will be automatically pushed to the opening video channel.

The self-introductions, greetings, and the introductions of work before making performances are means for members to allow other members to get to know them.

In the 51VV video community, members make *langsong* performances and interact with each other anonymously. They create nicknames to build their virtual identities online and identify others through this identity.

5.2 Public Tutorial

As we mentioned above, the members of the *langsong* room in the 51VV video community also include some famous broadcasters. Some of them have already retired. They have relatively more free time, so they are willing to teach and instruct the members who want to learn how to participate with *langsong*.

Generally, the members who want to hold public courses for room members need to give notice to the room administrator in advance. They need to tell the room administrator about the exact time, exact date, duration, and the exact content of what they want to teach. Then, the room administrator will publish the message on the notice board of the room, and upload the literary work offered by the "teacher" that will be used in the course to the public space of the room. The message published on the notice board would be something like:

"[Yinyun] (the teacher's nickname in the community) will hold a public course on March 6th from 20.00 to 22.00. Members who want to take this course please download the allocated literary work from the public space."

Thus, the members who want to take the course can download the pertinent literary work from the public space of the room and practice it in advance. However, they cannot make the appointment about the exact time slot of the course. Usually, the rule is "first come, first performed."

When the "teacher" makes the public tutorial, the room administrator will adjust the video settings in that period of time that makes two video channels kept open. One channel is for the "teacher," and the other channel is for the "student." During the course, the teacher will be kept on one video channel all the time while the students will be presented on the other video channel one by one according to the waiting list. In order to create better learning for the students, it is required that both the teacher and the student show their faces at the video windows via real time video.

The activity form of public tutorial reflects the fulfillment of needs of "sense of virtual community". Koh and Kim (2003) state that the fulfillment of needs mainly reflects the expectations of the members, which contributes to members' feelings of belonging to the community. In the *langsong* room of the 51VV video community, the "teacher" members can feel their needs being fulfilled by sensing their values in the community through sharing *langsong* skills with other members and instructing other members, while the "student" members can sense their needs being fulfilled by obtaining the knowledge of *langsong* skills through public tutorial courses. Both the "teacher" members and the "student" members can actually feel the same sense of belongingness in the 51VV video community through the public tutorial activity.

5.3 Topic evening party

The room administrators will also hold some topic evening parties in the room irregularly. As we know, Chinese people like to celebrate various festivals by holding entertainment evening parties, such as the Spring Festival Gala, the Lantern Festival Gala, and the National Day's Evening Party, etc. An entertainment evening party usually consists of various programs, such as singing, dancing, crosstalk, and witty skits, etc. In the past, any community member could watch (on a view-only basis) this kind of party as an audience member in front of the television. But now, because of new media, as a member of the 51VV video community, any community member can participate as audience and/or performer in an evening party held by the virtual community. M6 writes in his questionnaire that "in the 51VV video community, we are both audiences, as well as performers."

Like the evening parties broadcast on television, the entertainment evening parties held by the *langsong* room of the 51VV video community also have celebration topics. Usually, the celebration topic relates to a particular festival, such as celebration of the Spring Festival. However, the forms of the programs of the entertainment evening party of the *langsong* room mainly consist of the performance of *langsong*. The content of the works being performed should relate to the celebration topic, accordingly.

Before holding an entertainment evening party, the room administrator will publish the information on the notice board of the room. Then, the member who wants to perform at the party needs to register with the room administrator in advance, including stating what literary work they want to perform at the party, the form about the performance, such as *langsong* alone or making *langsong* together with other room members. According to the content of the work and the form of the performance, the room administrator will list a playbill and assign tasks to the members who want to do voluntary work for the party.

Since the programs of the evening party need to be performed sequentially, the waiting list is not automatically sequenced by clicking the button "wait for the microphone" by the participants, but instead it is controlled by the volunteer. According to the sequence of the program, the volunteer who controls the waiting list will push the performers to the allocated video channels when they are making their performance at the party. Differently than with daily entertainment, in order to have better effects with the performance, all the members who participate in the performances must present themselves on the videos. In order to have better visual effects, each performance will be equipped with a background image that matches the content of the work, as well as the subtitle of the work. Since the image will be presented in the whole video area, all three video channels will keep opening all the time during the evening party (image 5-2). Even though the work is only performed by one participant, the spare video channels need to be kept open for the background image (image 5-3). The settings of the background image are also controlled by the volunteers. Besides, in order to better express the feelings and the thoughts of the work, each work will also be equipped with background music to enrich the performance. The background music is selected by the performers and will be played by the performers as well. At the entertainment evening party, since there are commentators to string the programs, and to introduce the performers and the works, the performers will directly make performances when being pushed to the allocated video channels without speaking a few words before their performances start.



Image 5-2



Image 5-3

In order to make a successful topic evening party, members need to do a lot of preparation work including making rehearsals. Some members participate in the topic evening party as performers, while some other members join in the topic evening party as workers. The workers have responsibilities such as creating the background image and subtitle producing, controlling the audio channel for sequences, and for the commentary on the words written, etc. In the process of preparing or rehearsing the performance, there will be a lot of interactions between members. The more people interact, the more likely they form close relationships, which subsequently leads to a stronger bond in the community (McMillan & Chavis, 1986).

6. Patterns of self-presentation

A number of virtual community scholars have investigated how members create their virtual identities online (Baym, 1997; Wellman & Gulia, 1999), and how they are able to identify other members and link community actions to certain identities (Blanchard & Markus, 2004). Different patterns of self-presentations is one way that members can create their virtual identities in the 51VV video community.

Since the performances on both the public tutorial and the topic evening party have their allocated forms and themes, the discussions of patterns of participants' self-presentations in this section are mainly based on the performances of the daily entertainment.

6.1 Self-presentation on audio-visual aspects

As reviewed, when making performances for daily entertainment, the participants can choose either to be presented on the video or only to present their voices to the room members. People always like to show the best of themselves to others. Usually, the younger participants or the participants with well-prepared appearances like to present themselves on the video. For most of the senior participants, and particularly for the female participants, they usually prefer to only present their voices when performing, as opposed to presenting their faces appearing in the video. The reasons for this are because one's voice may not disclose real age, and an attractive voice can leave people in an imaginary space. If the participants decide to show themselves on the video, generally they will use the filter to beautify the image making for what they feel is a better impression. Additionally, performing a work with background music can enhance the appeal of the performance. Music is an element with emotional expression. Performing the same work by different people with different background music can imbue the work with different meanings. It can be an indication that the selection of the music or work reflects one's understanding of the work, as well as being an expression of one's artistic tastes.

6.2 Self-presentation on the content of the work

As aforementioned, the participants can freely choose any literary work in the daily entertainment -- whatever they would like to perform for the community. What kind of literary work a participant chooses to perform to some extent reflects the level of the participant's *langsong* skills, as well as the extent of the participant's literary expertise. Usually, the participants with good *langsong* skills prefer to perform some challenging or complex poems while the participants who are the beginners in learning *langsong* like to perform more simple lyrical prose. This is because it's more difficult to control one's voice and breath when performing the more challenging poem than when performing the lyrical prose. That is to say, for some beginners, they are more likely to choose the works which are easier to perform, so they can avoid exposing their lack of *langsong* skills.

Some participants like to perform the literary works written by a particular author while some participants prefer to perform some writings they themselves have composed. The participant who usually performs the literary works of a particular author shows their literary preference to room members, while the participant who performs the self-authored work presents their strong skills of writing, both of which reflect one's degree of literary accomplishments.

No matter whether a member uses the self-presentation on audio-visual aspects or on the content of the *langsong* work, they are both, ways for members to establish and disclose their identities in the 51VV video community.

7. Patterns of interaction and construction of relationships

McMillan & Chavis (1986) state that the shared emotional connection derives from a shared community history, shared events, positive interaction, and identification with the community. The more people interact, the more likely close relationships are formed between people, and therefore leads to a stronger bond between people in the community.

7.1 Patterns of interaction

Along with sharing interests and making performances for sharing on the video in the 51VV video community, members can also interact with each other via video and text message. There is a message board under the video area, where members can make comments and join discussions (image 5-1). Generally, the members will post messages on the message board to praise someone's performance or discuss something they are interested in. The messages can be posted in three types: posted as a public message to unspecified members that can be seen by all room members; posted as a public message to specified members that can be seen by all room members; posted as a private message to specified members that can only be seen by the specified members. Usually, the members post public messages to all members to give greetings or to ask questions about what they experienced during their practices of making langsong. All members can participate in a discussion to answer the questions posted on the message board. If the member wants to reply to a message of a specified member, they can click the name of the member on the message board. Thus, the replied message published on the message board will show to whom the message is replied. Generally, the members will also send messages on the message board to the members who are performing. This kind of message includes the text message, facial icon, and a virtual gift, which is used to express one's appreciation to the performer. Sometimes, the performers will show their thanks via audio or video to the members who send the message of praise or the gift, such as saying "thanks for [Xiaohui's] gift" at the end of the performance. Sometimes they will reply to the specified members on the message board after finishing a performance. In the process of the interaction, if the member wants to send a message to a specified member in private they can click the button "whisper," then the message can only be seen by that specified member. Usually, the mutual response between members can bring them into a close interaction, which constructs relationships between them.

7.2 Construction of relationships

Many studies have shown that social relationships can be established in online settings. According to my participant observations as a participant, I conclude three salient relationships which were constructed in the *langsong* room of the 51VV video community: friendship relationship, teacher-student relationship, and companionship relationship.

Friendship relationship

Some investigations of social interaction in online settings show that it is difficult to make close friends and engage in personal, emotional, and social interactions online (Short et al., 1976; Daft & Lengel, 1984), while some others report empirical findings showing that individuals can indeed build close relationships in online communities (Pfeil & Zaphiris, 2007; Parks & Floyd, 1996; Preece, 1998, 2000). When making investigations about older adults' perception of social support in online settings, Pfeil et al. (2009) find that, when compared to physical face-to-face communication, people are more courageous about talking themselves in online settings due to the anonymity and the fact that people do not have to face the other person directly when writing a message.

One of the reasons for most members gave for participating in the *langsong* room of the 51VV video community is because that they like *langsong*. Since *langsong* is a relatively elegant interest, it's not easy for members to meet people who share an interest such as this in their real lives. Even though the 51VV video community is created to be a virtual community where people can make

entertainment, share interests, and make and share performances, friendship is indeed constructed between members.

When asking members about their feelings around participating in the *langsong* room of the 51VV video community, many of them say that they have found lots of like-minded friends. Besides, with the deepening of the interactions, outside of communicating about things relating to *langsong*, members will also share with each other what is happening in their real lives, such as problems they meet in the physical world.

F5 says:

"For our adults, with the growth of age, it's more and more difficult to make true friends in our real lives. I prefer to share my story with the strangers online. It makes me feel easy and I have no burden. Though the member's name is false, the sense of friendship between us is true."

Compared to text-based virtual communities, the video involved virtual communication experience in the 51VV video community is more similar to that of offline face-to-face communication, members might remain anonymous by not disclosing their real names, and therefore don't worry about being a burden to the other person when talking about their stories or problems.

Teacher-student relationship

Blit-Cohan and Litwin (2004) state that participating in online settings allows elderly people to develop social ties, strengthens the flow of information, and enhances norms of reciprocity through computer mediated networks. Comparing relationships in traditional media with that in a virtual community, the former involves passive receiving of information, while in the latter invites participants to use technology to actively interact with each.

According to data from questionnaires, another reason for most members to participate in the *langsong* room of the 51VV video community is because they want to learn how to make *langsong*. Some members want to learn while other members want to teach. As reviewed, some retired broadcasters are willing to hold free public tutorial course for members who want to enhance their *langsong* skills. It seemed that the processes of both learning and teaching -- those who want to

learn how to make *langsong* and those who want to teach how to make *langsong* -- are both very important aspects of involvement.

For example, M3, who has the experience of taking the public tutorial course says:

"I enjoy the process of learning, as well as the feeling of learning. I never thought that I could get the recognition from a professional broadcaster. There's a saying 'you're never too old to learn.' In the process of learning how to make *langsong*, I felt that I became more confident when I communicate with people, and at the same time I felt that my literary cultivation was being enhanced."

At the same time, F21, who used to be a famous TV broadcaster, states:

"I'm willing to share my *langsong* skills with other members, and I like to hold public tutorial courses for other members. Actually, the voice conditions of some members are very good, but they didn't realize this before. Some members told me that I helped them see themselves in a new light. I'm very glad to hear that. Though I've retired, I could continue my 'career' in another way in the virtual community. I can feel the sense of being loved and recognized. I can find my value in the 51VV video community."

No matter if it is about the process of teaching or learning, it is a way for elderly people to communicate with each other and to learn from each other. The process of teaching and learning is all about the process of information exchange. In this process, both members as "teacher" or as "student" can find their values and obtain the sense of belongingness.

Companionship relationship

Companionship relationship has been found in previous elderly people's online experience studies (Kanayama, 2003). It has been found to bolster elderly people's self-esteem, which contribute to their psychological well-being (Rook, 1987).

Despite their initial reasons for participating in the *langsong* room of the 51VV video community, some members gradually found other reasons. During the process of presenting themselves via performances and communicating with each other, a subtle emotional bond was generated between some members of the

opposite sex. They appreciated each other and were attracted to each other. They liked to perform the work together, and sometimes use enthusiastic words to praise each other. It seemed that an emotional dependence was established between them. I term this kind of relationship as a companionship relationship, like M6 wrote in his questionnaire "I found my soul mate in this virtual community."

For some members, their partners in this kind of companionship relationship are only their soul mates only in the virtual community. They will never see each other in the physical world. However, for some others, they will extend this companionship relationship into the physical world. And, because the companionship relationship may be extended into the physical world, some members who are married will receive some dissatisfaction from their family if they frequently participate in community activities online. M8 mentioned in his questionnaire that participating in the 51VV video community will sometimes cause some family disputes between him and his wife. He explained that his wife didn't like him to participate in community activities online so frequently, and would control his time spent online, since she was worried that he might fall in love with somebody online, which would have an impact on their family. Perhaps this is a reason that why the proportion of the female members is much higher than the proportion of male members in the *langsong* room of the 51VV community.

Conclusion

This study attempts to understand the experience of Chinese middle-aged and elderly people online, focusing particularly on how they share their interests with others, how they interact with others, and how they construct social relationships in an audiovisual-based online virtual community -- the 51VV video community.

Virtual ethnographic research collected via participant observations and interviews are mainly utilized in this study. In order to obtain the trust of the community members, as well as avoid the ethical issues, I assumed a position of a non-active participant in this participant observation study in the 51VV video community. However, through participant observations, I can only observe members' behaviors of how they perform their langsong work and how they present themselves in the 51VV video community, but cannot know their motivations of why they participate in the 51VV video community and their feelings about using the 51VV video community. In order to seek answers about questions which I cannot obtain solely from participant observations, I also made a questionnaire using open-ended questions as the supplementary method in this study. The most important function of the questionnaire was that of helping me adequately focus on the target group in this study. Since the 51VV video community is an audiovisual-based virtual community, participants need to show their faces on the video to all community members when making performances. So I assumed that the ages the participants wrote on the questionnaires were authentic. Interviews are supplementary for seeking more in-depth responses when initial answers to the questionnaires indicated there might be something more interesting to explore further.

Based on the literature, the members who participate in the 51VV video community are more likely to share their interests and present their talents to community members rather than simply discuss a specific subject with the community members. Despite their initial reasons for participating in a virtual community, the members' motivations may also be influenced by other members and the community itself. According to Kelman's (1974) social influence theory, being influenced by the opinion of the important people of the membership, being influenced by the sense of belongingness and attachment which other members or

the community bring to the member, and being influenced by the specific norms of the community which is in alignment with the member's values can also influence a member's decision to participate in the 51VV video community.

With the popularity of high-speed internet and the aging population in China, Chinese middle-aged and elderly people are no longer "traditional media audiences," but are gradually increasing their active participation in online virtual communities to enjoy their lives in a new way. In this study, Chinese middle-aged and elderly people extend their interest in langsong, extending from the physical world into a virtual world, which constructs social relationships in an audiovisual-based virtual community. They transfer their favorite literary works into audible form, performing the works through online audio or video for an audience of all the community members. In order to show their best to other members, they will choose the works which best suit their voices, highlighting their strong points or avoiding any shortcomings. For senior members, they don't like to present themselves on the video when performing in the daily entertainment. It is the members who are relatively young or with good appearances prefer to present themselves on the video when making performances. Generally, the members who present themselves on the video are well-dressed, and sometimes use the filter to beautify their images to improve their look. Additionally, sometimes members will add background music to the work during the performance to obtain a better effect. No matter what the work selection or background music choice might be, both aspects can reflect the members' artistic tastes and level of literary accomplishments. All of the patterns of members' self-presentations mentioned above are actually ways that members create their identities online and disclose their virtual identities to other members in the 51VV video community.

Rheingold (1993) states that though individuals leave their bodies behind a screen in the virtual community, their embodiment in the virtual world can be socially and psychologically constructed. In this study, by sharing their interests via online audio or video, and by interacting with other members via instant messaging and online audio or video, three salient relationships are constructed among members in the 51VV video community: friendship relationship, teacher-student relationship, and companionship relationship. The virtual community might be a new place where Chinese middle-aged and elderly people can develop their interests and communicate with people who share similar interests with them.

Though the community is virtual, the relationships constructed in the virtual community are real.

It was observed that some middle-aged and elderly individuals extended their relationships constructed in the virtual world to the physical world. Some of them who had good friendship relationships had already met each other in the physical world and some had travelled together, while others who were in companionship relationships actually married each other in their real lives. This study was a focus on the phenomenon "from physical to virtual." However, it also might be interesting and valuable to research the phenomenon "from virtual to physical." Since most of recent studies about elderly people's virtual community experience have been mainly focused on research done on text-based virtual communities, more investigations about elderly people's virtual community experience in non-text-based virtual communities need to be conducted to fill a relatively blank space of the academic study. Lastly, as the forms and characteristics of the virtual community evolve and change over time, the virtual community merits robust, ongoing research into the future.

Bibliography

Abfalter, D., Zaglia, M. E., & Mueller, J. (2012). Sense of virtual community: A follow up on its measurement. *Computers in Human Behavior*, 28(2), 400-404.

Bagozzi, R.P. and Lee, K.-H. (2002), "Multiple routes for social influence: the role of compliance, internalization, and social identity," Social Psychology Quarterly, Vol. 65 No. 3, pp. 226-47.

Baym, N. K. (1997). Interpreting soap operas and creating community: Inside an electronic fan culture. In S. Kiesler (Ed.), Culture of the Internet (pp. 103–120). Mahwah, NJ: Lawrence Erlbaum.

Bender, T. (1978). Community and social change in America. New Brunswick, NJ: Rutgers University Press.

Blanchard, A. L. (2007). Developing a sense of virtual community measure. Cyber Psychology & Behavior, 10, 827–830.

Blanchard, A. L. (2008). Testing a model of sense of virtual community. Computers in Human Behavior, 24, 2107–2123.

Blanchard, A. L., & Markus, M. L. (2004). The experienced "sense" of a virtual community: characteristics and processes. The DATA BASE for Advances in Information Systems, 35, 65–79.

Bleise, N. (1982) 'Media in the Rocking Chair: Media Uses and Functions Among the Elderly,' in G. Bierig, J. and J. Dimmick (1979) 'The Late Night Radio Talk Show as Interpersonal Communication,' Journal Quarterly 56(1): 92–6.

Blit-Cohen, E., & Litwin, H. (2004). Elder participation in cyberspace: A qualitative analysis of Israeli retirees. *Journal of Aging Studies*, *18*(4), 385-398.

Charness, N., & Holley, P. (2004). The New Media and Older Adults Usable and Useful? American Behavioral Scientist, 48(4), 416-433.

Chavis, D.M., & Wandersman, A. (1990). Sense of community in the urban environment: A catalyst for participation and community development. American Journal of Community Psychology, 18(1), 55-81.

Chu, K.-M. (2009). A study of members' helping behaviors in online community. Internet Research, 19(3), 279–292.

CNNIC (2010), "26th statistical survey report on the internet development in China," China Internet Network Information Center, available at: www.cnnic.cn

CNNIC (2015), "35th statistical survey report on the internet development in China," China Internet Network Information Center, available at: www.cnnic.cn

Daft, R. L., & Lengel, R. H. (1983). *Information richness. A new approach to managerial behavior and organization design* (No. TR-ONR-DG-02). Texas A and M Univ College Station Coll of Business Administration.

Danowski, J. (1975) 'Informational aging: Interpersonal and Mass Communication Patterns at a Retirement Community,' paper presented at the meeting of the Gerontological Society, Louisville, KY, November.

Dholakia, U.M., Bagozzi, R.P. and Pearo, L.K. (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. 241-63.

Domínguez, D., Beaulieu, A., Estalella, A., Gómez, E., Schnettler, B. and Read, R., 2007. Virtual ethnography. In Forum Qualitative Sozialforschung/Forum: Qualitative Social Research (Vol. 8, No. 3, pp. 3-07).

Ellis, D., Oldridge, R., & Vasconcelos, A. (2004). Community and virtual community. Annual review of information science and technology, 38(1), 145-186.

Firat, M. and Yurdakul, I.K. (2011) Virtual ethnography research on second life virtual communities. Turkish Online Journal of Distance Education, 12(3), pp.108-117.

Fox, N. and C. Roberts (1999) 'GPs in Cyberspace: the Sociology of a "Virtual Community," Sociological Review 47(4): 643–71.

Graney, M. and E. Graney (1974) 'Communication Activity Substitution in Aging,' Journal of Communication 24(4): 88–96.

Graney, M. J. (1975) 'Happiness and Social Participation in Aging,' Journal of Gerontology 30(6): 701–6.

Gumpert and R. Cathcart (eds), Inter/Media: Interpersonal Communication in a Media World (2nd ed), pp. 624–34. New York: Oxford University Press.

Handy, C. (1995). Trust and the virtual organization. Harvard Business Review, 73 (3), 40–48.

Hillery, G. A. (1955). Definitions of community: Areas of agreement. Rural sociology, 20, 111-123.

Jones, S.G. (1995) 'Understanding Community in the Information Age,' in S.G. Jones (ed.), CyberSociety: Computer-Mediated Communication and Community, pp. 10–35. Thousand Oaks, CA: Sage.

Kanayama, T. (2003). Ethnographic research on the experience of Japanese elderly people online. New Media & Society, 5(2), 267-288.

Kazi, A. M., & Khalid, W. (2012). Questionnaire designing and validation. Journal of the Pakistan Medical Association, 62(5), 514.

Kelman, H.C. (1974), "Further thoughts on the processes of compliance, identification, and internalization," in Tedeschi, J.T. (Ed.), Perspectives on Social Power, Aldine Press, Chicago, IL, pp. 126-71.

- Koh, J., & Kim, Y. G. (2003). Sense of virtual community: A conceptual framework and empirical validation. International Journal of Electronic Commerce, 8, 75–93.
- Kozinets, R. V. (2006). Netnography. In V. Jupp (Ed.), The sage dictionary of social research methods (pp. 135). London: Sage Publications.
- Kozinets, R. V. (2010). Netnography: Doing ethnographic research online. London: Sage Publications.
- Lohr, S. (2003, May 11). "Newmedia": Ready for the dustbin of history? New York Times. Retrieved from http://www.nytimes.com
- Markham, A.N. (1998) Life Online: Researching Real Experience in Virtual Space. Walnut Creek, CA: AltaMira Press.
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. Journal of Community Psychology, 14, 6–23.
- Nussbaum, J.F., T. Thompson and J.D. Robinson (1989) Communication and Aging. New York: Harper & Row.
- Parks, M. R., & Floyd, K. (1996). Making friends in cyberspace. *Journal of Computer-Mediated Communication*, 1(4), 0-0.
- Pfeil, U., & Zaphiris, P. (2007, April). Patterns of empathy in online communication. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 919-928). ACM.
- Pfeil, U., Zaphiris, P., & Wilson, S. (2009). Older adults' perceptions and experiences of online social support. *Interacting with computers*, 21(3), 159-172.
- Preece, J. (1998). Empathic communities: reaching out across the Web. *Interactions*, 5(2), 32-43.

Preece, J. (2000). Empathy online. Virtual Reality 4, 74–84.

Rheingold, H. (1994). The virtual community: Finding connection in a computerized world. London: Minerva.

Ridings, C. M., & Gefen, D. (2004). Virtual community attraction: Why people hang out online. Journal of Computer-Mediated Communication, 10(1), 00-00.

Rook, K. S. (1987). Social support versus companionship: Effects on life stress, loneliness, and evalu- ations by others. *Journal of Personality and Social Psychology*, *52*, 1132–1147.

Rotman, D., Golbeck, J., & Preece, J. (2009). The community is where the rapport is---on sense and structure in the youtube community. InProceedings of the fourth international conference on Communities and technologies (pp. 41-50). ACM.

Sangwan, S., Guan, C., & Siguaw, J. A. (2009). Virtual social networks: Toward a research agenda. International Journal of Virtual Communities and Social Networking, 1, 1–13.

Short, J., Williams, E., & Christie, B. (1976). The social psychology of telecommunications.

Tonteri, L., Kosonen, M., Ellonen, H. K., & Tarkiainen, A. (2011). Antecedents of an experienced sense of virtual community. *Computers in Human Behavior*, 27(6), 2215-2223.

Turow, J. (1974) 'Talk Show Radio as Interpersonal Communication,' Journal of Broadcasting 18: 171–9.

The WELL: http://www.well.com/aboutwell.html

Virtual Ethnography:

https://sites.google.com/site/virtualethnography/about_pathfinder

Ward, K.J. (1999) 'Cyber-ethnography and the Emergence of the Virtually New Community,' Journal of Information Technology 14(1): 95–105.

Wellman, B. (1988) 'The community question re-evaluated,' in Smith, M.P. (Ed.): Power, Community and the City, Transaction Books, New Brunswick, NJ.

Wellman, B., & Gulia, M. (1999). Virtual communities as communities. In M. A.Smith & P.Kollock (Eds.), Communities in cyberspace (pp. 167–194). New York: Routledge.

Wenner, L. (1976) 'Functional Analysis of TV Viewing for Older Adults,' Journal of Broadcasting 20(1): 77–88.

When New Media Meet Population Aging. Overseas Edition of People's Daily. July 23, 2015.

Williams, A. (2014). How to... Write and analyse a questionnaire. *Journal of Orthodontics*.

Wright, K. (2000). Computer-mediated social support, older adults, and coping. *Journal of Communication*, 50(3), 100-118.

Zhou, T. (2011). Understanding online community user participation: a social influence perspective. Internet Research, 21(1), 67-81.

Appendix 1: Participants' basic personal information

	Gender	Age	City & Province	Highest Level of Education Obtained	Occupation (If retired, please write the previous occupation.)
M1	Male	51	Tai'an, Shandong	Master	Party School office worker
M2	Male	46	Urumqi, Xinjiang	Bachelor	Radio Station Broadcaster
M3	Male	46	Anshan, Liaoning	Bachelor	Manufacturing
M4	Male	43	Yinchuan, Ningxia	Bachelor	Party School office worker
M5	Male	69	Dandong, Liaoning	High School	Artist
M6	Male	59	Xuzhou, Jiangsu	Junior College	Civil servant
M7	Male	40	Qiqihar, Heilongjiang	Bachelor	Office worker
M8	Male	45	Anshan, Liaoning	Junior College	Government
M9	Male	40	Tianjin	Bachelor	Power Engineer
M10	Male	41	Baoding, Hebei	Bachelor	Agriculture Bureau
M11	Male	46	Xi'an, Shanxi	Bachelor	Media
M12	Male	55	Xuzhou, Jiangsu	Bachelor	High school teacher
F1	Female	47	Changchun, Jilin	Bachelor	University teacher
F2	Female	51	Dandong, Liaoning	Bachelor	Radio and Television Engineering
F3	Female	53	Dandong, Liaoning	Secondary School	Retired (Textile worker)
F4	Female	53	Shijiazhuang, Hebei	Junior College	Administrative work
F5	Female	42	Shijiazhuang, Hebei	Master	University teacher & Editor
F6	Female	45	Linfen, Shanxi	Bachelor	Journalist

	Gender	Age	City & Province	Highest Level of Education Obtained	Occupation (If retired, please write the previous occupation.)
F7	Female	46	Shihezi, Xinjiang	Junior College	Business
F8	Female	61	Dandong, Liaoning	Junior College	Retired (Municipal Propaganda Department)
F9	Female	48	Hubei	Second School	Statistics
F10	Female	47	Hebei	Bachelor	Civil servant
F11	Female	50	Wuhan, Hubei	Junior College	Education
F12	Female	45	Handan, Hebei	Bachelor	Education
F13	Female	45	Ma'anshan, Anhui	Bachelor	Office worker
F14	Female	45	Urumqi, Xinjiang	Bachelor	Teacher
F15	Female	66	Dalian, Liaoning	Bachelor	Business
F16	Female	49	Guanghan, Sichuan	Bachelor	Party School worker
F17	Female	47	Linyi, Shandong	Bachelor	Finance
F18	Female	65	Dandong, Liaoning	Bachelor	Retired (Finance)
F19	Female	54	Dandong, Liaoning	Master	Teacher
F20	Female	59	Yinchuan, Ningxia	Junior College	Retired (Engineer)
F21	Female	58	Xi'an, Shanxi	Bachelor	Retired (TV Broadcaster)
F22	Female	53	Changsha, Hunan	High School	Retired (Office worker)
F23	Female	48	Tianjin	Master	Editor
F24	Female	44	Yinchuan, Ningxia	Bachelor	Doctor

Appendix 2: Questionnaire

- 1. Nickname
- 2. Gender
- 3. Age
- 4. City & Province
- 5. Highest level of education obtained
- 6. Income each year
- 7. What is your occupation? If you have retired, what was your occupation before retirement?
- 8. How did you learn about (the *langsong* room of) the 51VV video community?
- 9. What is your mainly purpose for participating in (the *langsong* room of) the 51VV video community?
- 10. How long have you participated in (the *langsong* room of) the 51VV video community?
- 11. Have you ever participated in similar online virtual communities? If you have, please list their names.
- 12. Have you ever participated in physical entertainment communities? If you have, please list their names or describe what kinds of communities they are.
- 13. Do you watch TV or listen to the radio? If you do, what are the differences in the entertainment experience of watching TV and listening to the radio, and participating in (the *langsong* room of) the 51VV video community?
- 14. What are your feelings about participating in (the *langsong* room of) the 51VV video community?
- 15. What influence has the 51VV video community had on your daily life?
- 16. Have you ever meet any technical problem when participating in (the *langsong* room of) the 51VV video community? If you have, what was it?