# You Are Not Alone Online: A Case Study of a Long Distance Romantic Relationship Online Community

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Abstract. Previous research on long distance romantic relationships (LDRRs) has tended to focus on the two people that make up the couple. With the advent of LDRR online communities, however, there is a need to expand the analysis to include larger social structures. Currently little is known about how and why individuals who are in LDRRs use LDRR online communities and what effect participating in this kind of public online space has on maintaining LDRRs. In this paper, we introduce a popular Chinese LDRR online community, the LDRR public page on Chinese Facebook, Renren, and report exploratory interviews conducted with users of this community to understand their behaviors and motivations for using it. We found that: 1) users lurk most of the time unless their strong empathy is aroused; 2) users' four major motivations are belonging, empathy, social support, and learning; 3) initial and continued motivations have different patterns; 4) perceived social support is the main benefit of participating in the LDRR public page.

**Keywords:** Long-distance romantic relationships, Online community, Renren, Public page, Motivation.

#### 1 Introduction

"Another day has gone. I'm still all alone. How could this be? You're not here with me...Did you have to go? And leave my world so cold..." As Michael Jackson sang, long-distance romantic relationship (LDRR) couples have to face the harsh reality that they are separated from each other by physical distance most of the time in their daily life [1]. Today more and more couples worldwide are coping with LDRRs. By 2012, more than 14 million couples worldwide claimed they were in a LDRR [25]. Among all the people who are in LDRRs, college students predominate [22].

Because of lack of opportunities for face-to-face interaction, LDRR couples have to rely on various mediated forms of communication (e.g. cell phones, email, instant messaging tools, and social network sites) to maintain their relationships. Previous researchers have investigated the behaviors that contribute to maintaining LDRRs via mediated means (e.g. [13, 17, 18, 29, 33, 34]), and developed new technologies (e.g. [2, 8, 9, 14]) specifically for supporting LDRRs. These studies focus almost exclusively on the two members of a couple. This focus makes intuitive sense because

romantic relationships are a special type of intimate interpersonal relationship, and the communication and interaction behaviors are often private and personal. However, public expression is also important in maintaining intimate relationships [7, 30]. We contend that the way people behave in maintaining their LDRRs via mediated forms of communication extends to larger groups of people in a public environment.

With the growing acceptance of online communities over the past thirty years, LDRR online communities have appeared in many countries to support LDRR couples. A large number of studies have investigated online social support communities covering many different kinds of topics (e.g. illness, social problems) [19], but LDRRs have not yet benefitted from such research. We know little about these kinds of online communities and their users. This is a new focus in studies of both LDRR maintenance and online support communities. This paper is an initial attempt to explore one LDRR online community and its users by taking advantage of grounded theory.

Our goal is to explore how and why users use a LDRR online community, and the benefits they derive from it. We conducted a semi-structured interview study in which we investigated one popular Chinese LDRR online community: the LDRR public page on Renren, the Chinese equivalent of Facebook.

Ultimately, our aim is to help researchers and designers better understand LDRR couples' needs and what will help them sustain their LDRRs. This paper makes three important contributions. First, we explore a case of an under-researched type of online social support community: an LDRR community. Second, we depart from the predominant approach of focusing on couple-oriented interaction, choosing instead to investigate the needs of individuals who are in LDRRs from a community-oriented perspective. Third, this exploratory study indicates the importance of the online community owner's role in sustaining and empowering the community.

#### 2 Related Work

LDRR couples have fewer opportunities to interact with each other face-to-face and limited mediated interaction opportunities [24]. Furthermore, LDRR couples have other concerns that Geographically Close Romantic Relationship (GCRR) couples do not have, such as economic problems arising from telephone and travel expenses, coping with roller-coaster like emotions every time they meet and separate, and assessing the future of their relationships ([23], p.29; [31]). Consequently, LDRR couples are more likely to feel depressed, stressful and lonely than GCRR couples [10].

Among the technologies which have been widely adopted by the public, phones [e.g. 4] and video camera chatting [e.g. 33] are the most important and popular mediated means of communication for LDRR couples. However, they are insufficient for helping LDRR couples feel as emotionally close to each other as their GCRR counterparts. In the HCI field, researchers have developed innovative technologies for supporting LDRR couples' interaction (e.g. [14, 2]). These technologies often involve one half of a LDRR couple being made aware of the other half's presence by

mimicking intimate forms of communication, such as Sensing Beds [9], which can sense the body position of one member of a LDRR couple in his or her bed, and then make the corresponding parts of the other half's bed warm, thus simulating copresence.

Although a couple's private interaction has a direct bearing on the outcome of a relationship, the broader social environment is also important and can affect the nature of the couple's interaction [27]. In offline studies, researchers usually consider the influences of social networks on intimate relationships [27]. Furthermore, the effective provision of support probably springs from people who share similar social conditions and stressful experiences with the support recipients [28]. Having similar experiences increases a support provider's empathic understanding [11]. We believe the results of these offline studies are relevant to LDRR couples' online social networks.

The previous research summarized here provides us with important insights and background information. We are interested in a new type of public online support group. We want to explore why people join it, how they use it, and what they get from it. We have therefore chosen a popular LDRR online community that was built on the largest SNS in China. We opted for an open-ended and bottom-up approach in this exploratory study using Grounded Theory to help answer these questions.

## 3 Studying LDRR Online Community Practice

## 3.1 Research Site: LDRR Public Page on Renren

Chinese Facebook, Renren (Renren.com), was launched in 2005. It has now become the largest SNS in China with more than 200 million users to date. The public page, known simply as "Page," is one of the basic features on Renren. It allows individuals and organizations to build their public pages to establish closer relationships with their audience. Public pages have no privacy settings. Every Renren user can voluntarily follow any public page they are interested in, receive the latest updates from these pages, and communicate with the owners and the users of these pages.

The LDRR public page (异地恋, yidilian, a Chinese phrase that can be literally translated as "LDRRs"), is one of the most popular public pages on Renren (http://page.renren.com/600003160?checked=true). By February 2013, it already had more than 350,000 followers, and has become the fastest growing and largest LDRR online community in China. This number is increasing every day. The LDRR public page has basic features similar to those of Facebook including a Home Page, Wall, Comments, Information, Status, Photos, Diaries, Share, Message, Friends, etc. It also has exclusive and customizable features that include Video, Vote, Forum, Evaluation, Public Photos, Like, and Background Image. All followers have to have a Renren account before joining the public page.

Unlike many other online communities whose owners have less authority and control over their users, the owners of the LDRR public page have considerable authority and from their official position can control many of their followers' behaviors, in effect functioning as a super "guru" in this group. Only the owners can

update the status; post diaries, photos, videos, and links; initiate voting and evaluation; and manage the forum on the Renren LDRR public page. The followers are only allowed to leave short comments, send private messages, and @ other Renren users (share content with specific users by using the "@" symbol to mention their names) and so forth. The content posted by the owners is more heavily emphasized on the public page than that contributed by the followers.

#### 3.2 Data Collection

We conducted online semi-structured interviews in textual form in April and May of 2012. The interview questions included three sections: (1) demographic information; (2) LDRR status and conditions; and (3) users' behavior, motivation, and benefits. We used a Chinese online chatting tool, QQ, to conduct the interviews. Each interview lasted for 30 to 45 minutes. We recruited interviewees by using purposive sampling ([35]. p.145). We sent recruitment messages to 314 of the most recently active followers. The response rate was 6.69%. Twenty-one followers participated in the interview (Female=12, Male =9). They were all strangers to one another. Most interviewees' (15/21) partners are also LDRR public page followers, the rest of the interviewees' (6/21) partners are not. The interviewees' age range was from 18 to 28 (AVG=21.14, SD=2.17). Most of them (17/21) are undergraduate students and the rest (4/21) have jobs and bachelor degrees. All the interviewees were unmarried, and in stable heterosexual LDRRs. The duration of their romantic relationship ranges from 2 to 66 months (the median is 23 months), while the duration of their LDRR is from 2 to 36 months (the median is 10 months).

#### 3.3 Data Analysis

We used grounded theory [5] and consensual qualitative research methods [12] to analyze interviewees' answers in the third interview section (e.g. [16]). Grounded theory allows researchers to find the concepts and themes that naturally arise from the data itself [5]. Consensual qualitative research methods emphasize that the decisions are made by multiple researchers' consensus [12]. One researcher first used microanalysis or "detailed line-by-line analysis" ([26], p. 57; e.g. [32]) to identify initial concepts and categories by conducting open coding to divide interviewees' answers into units of meaning. Then two researchers adjusted initial categories together and reached consensus on a coding scheme. The overall Cohen's Kappa was high (.75). In the end, we conducted axial coding based on the initial concepts and categories, which revealed the potential relationships between categories.

# 4 Findings

We first describe interviewees' LDRR public page use behavior, and then specify the key concepts and categories of motivation and benefits emerging from the interviews. An analysis of different patterns of initial and continued motivations is presented.

Finally we examine the interviewees' motivations and the benefits they gained from using the LDRR public page. Interviewees' numbers are noted after each quote ('I': individual followers, whose partners are not the LDRR public page followers; 'P': pair followers, they and their partners are both followers; 'F'=female; 'M'=male).

#### 4.1 Use of the LDRR Public Page

Interviewees' time range for using the LDRR public page is from one month to 27 months. The median is four months. The frequency of use depends on the frequency of how often the owners of the public page update the contents. Interviewees read the update (i.e., status, photos, diaries, etc.) posted by the owners of the public page, but contribute to the content on the LDRR public page very infrequently. Previous research has defined this kind of behavior as "lurking" (e.g. [20]). All interviewees said they only left comments when they felt a specific status, story, picture, or comment aroused their strong empathy [15]. They left comments without necessarily intending to communicate with others. They did not expect a reply to their comments most of the time, but instead just wanted to reinforce and validate their own feelings.

#### 4.2 Motivations for Participating in the LDRR Public Page

We asked interviewees about their initial motivations for following the LDRR public page, and then asked them a separate question about their continued reasons for participating once they had joined the community in order to see whether new motivations emerged. We first combined interviewees' initial and continued motivations together and identified four major categories of concepts: (1) Belonging; (2) Empathy; (3) Social Support; and (4) Learning. These major motivations are related to each other rather than mutually exclusive.

**Belonging.** The need to belong is a fundamental, powerful, and extremely pervasive motivation [3]. For the followers on the LDRR public page, the need to belong could be met to some degree from joining a group whose members are in a similar situation. Most interviewees (19/21) mentioned that either they were in a LDRR, or they thought the other followers on this public page are engaged in LDRRs like them and this motivated them to follow the public page.

"The followers on the LDRR public page are all LDRR couples, I felt a strong sense of belonging because we cherish the same ideals and follow the same path." [I-12-F]

Their answers indicated that belonging is the primary motivation for participating in the LDRR public page. Sharing the same characteristics with other LDRR followers on this public page allowed them to form a social group together.

**Empathy.** Social groups foster heightened empathy [15] between group members by leading to social interactions or social ties (see review in [6]). Empathy in turn could be a motivation for participating in an online social group. More than half of interviewees (13/21) expressed a shared understanding with other Renren followers engaged in LDRRs and viewed their own feelings as identical to theirs.

"Many status updates written by the owners of the public page expressed exactly what I was feeling, making me feel they are so close to my heart." [I-15-M]

"Other followers' comments made me feel that I have the same feelings as them. Their LDRR stories also happened to me." [I-1-F]

Empathic understanding is particularly relevant to the exchange of emotional support and instrumental and informational support [11]. In other words, feeling empathy is also related to the following third and fourth major motivations: social support and learning.

**Social Support.** Interviewees perceived the positive effects of emotional support from the LDRR public page on themselves and their LDRRs, providing a strong motivation to use it. These positive effects make interviewees (5/21) "feel empowered" [P-2-M], and provides them "with more confidence" [I-21-F] to preserve their LDRRs; or allow interviewees (2/21) to adopt an optimistic outlook with respect to their LDRRs instead of focusing on the hardship of LDRRs. Other Interviewees also mentioned comfort ("When I feel sad and helpless, I visit the public page and find comfort in it" [P-5-F]); a reduced sense of loneliness ("the owners' status and other followers' comments make me feel not that lonely" [I-6-F]); and increased happiness ("I want to see the positive aspects of LDRR from this public page, to make me feel that the LDRR is as sweet as a GCRR, and I am happy in the LDRR" [P-9-M]). These and other comments all reflect the positive effects of social support on well-being.

**Learning.** Our interviewees expressed and confirmed the hardship of maintaining LDRRs. Half of the interviewees (11/21) mentioned that when they discovered the LDRR public page for the first time, they thought that it might be a place where they could learn from others how to maintain their LDRRs better.

"I use the public page because I want to learn how to build a better LDRR by understanding the LDRR-related information from the many perspectives provided on the public page." [I-7-M]

#### 4.3 Different Patterns of Initial and Continued Motivations

After we identified four major motivations, we then analyzed initial and continued motivations separately and categorized them into the four major categories discussed above. We analyzed the number of the units of initial and continued motivations in each category (Fig. 1) and found that belonging was the dominant motivation when

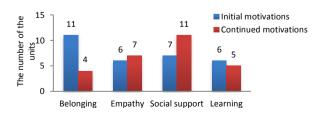


Fig. 1. Different patterns between initial and continued motivation

interviewees began to use the LDRR public page for the first time, while social support was the dominant motivation for continuing to use the public page. Empathy and learning played relatively equal roles in motivating interviewees to start participating in the public page for the first time, and for continuing to use it.

#### 4.4 A Comparison of Motivations and Benefits

The motivations reflect interviewees' needs and reasons for participating in the LDRR public page. We applied the same codes to identify motivations and benefits. We also analyzed the units of total motivations (including initial and continued motivations) and benefits (Fig. 2) and found that the benefits are mostly reflected in the form of perceived social support for using the public page. The different patterns between motivations and benefits do not mean followers did not get what they wanted. Instead, it conveys a meaning that satisfying the need to belong and feel empathy transformed to receiving effective social support from the public page.

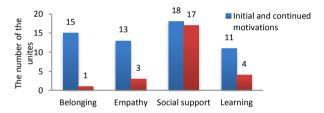


Fig. 2. Comparison of the total motivations and benefits

#### 5 Discussion

One major characteristic of the LDRR public page on Renren is that it is a hierarchically organized online support community rooted in the culture of China. Our interview study has found that most of our interviewees are lurkers who initially participated in this online community because they were motivated by strong feelings of belonging, and they continued to use it for the perceived social support.

Since members in most online communities usually have greater input and influence than the people who oversee the communities [21], the survival of online communities strongly depends on members' voluntary participation and contributions. However, in our case, the people who run the community have hierarchical authority over their members. Members' participation is still crucial, but nonetheless subordinate to the role of the community leader, whose contribution becomes vital to the well-being of the online community. If the public owners were to quit their involvement with the LDRR public page, the community would quickly wane.

Most of our interviewees are lurkers. Previous research has found that concern for privacy is one of several reasons for lurking [e.g. 20]. Since the LDRR public page followers have to use their real-name Renren IDs, allowing others to trace them back to their personal pages on Renren, followers may be more likely to lurk out of

concern for privacy, especially given that the topic under consideration on the LDRR page is one of personal intimate relationships. Another reason for lurking may be related to the design of the LDRR public page. One major design feature that fosters lurking: followers' limited ability to post and contribute to the content.

Although we chose an online community rooted in Chinese culture as our research site, many other culturally distinct and varied LDRR online communities exist. For example, there are popular LDRR online communities in the US, such as the LDRR public pages on Facebook. These show clear similarities to the LDRR public page on Renren in terms of purpose and content. The page designs and followers' behavior, however, are different in numerous respects. Their followers have greater authority than those on Renren. And the followers of the LDRR public page on Facebook are not exclusively from the US and are culturally more diverse than those on Renren. It may well be the case, then, that cultural differences play a role in helping explain the motivational and behavioral differences between users of the LDRR public page on RenRen and those on Facebook. This is an area that warrants further study.

People who are engaged in LDRRs need to know and feel they are not alone. The existence of LDRR public pages on SNS such as RenRen and Facebook allows them to satisfy these needs. We therefore suggest that designers have a critical role to play in creating systems, platforms, and devices that serve not only private communication between the two members of a couple, but also public communication among the individuals participating in these larger LDRR communities. Furthermore, the example of the LDRR public page on RenRen points to the need for design solutions that enhance the more expert- or owner-driven SNS model, for example by supplying better tools for owners to provide information, tell their stories, and curate content provided by followers. These features should be implemented with an eye to supporting the learning, sense of belonging, and empathic responses of users.

There are two major limitations to our study. First, we did not recruit both members of a couple. While we believe our interviewees' responses provide important insights, given our individual- and community-oriented (rather than couple-oriented) perspective, we would nonetheless like to recruit couples in the future, both members of whom follow the RenRen LDRR public page. Second, there are limitations to the sampling method that we used. In future studies we hope to conduct quantitative research and analysis based on random and large group members' data to extend and augment the results of our qualitative study that will provide more representative results.

#### 6 Conclusions

Our study is an initial attempt to explore an influential LDRR online community in a Chinese SNS. In order to understand users' behaviors and motivations, we conducted an exploratory interview study. We found that: 1) users lurk most of the time unless their empathy is strongly aroused; 2) users' four major motivations for using the LDRR public page are belonging, empathy, social support, and learning; 3) initial and continued motivations have different patterns; 4) perceived social support is the main

benefit of participating in the LDRR public page. The need to belong to a group of "similar others" held together largely by empathy and the desire for social support was particularly strong in this community.

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