Who Are Seeking Friends? The Portrait of Stranger-Seeker in Social Network Sites

Xitong Yue, Yuanyuan Shi, and Huajian Cai

Institute of Psychology, Chinese Academy of Sciences,
People's Republic of China
Huajian.cai@gmail.com

Abstract. We aim to understand the stranger seeking behaviors on Social Network Sites (SNSs) and learn about the characteristics of these people who frequently seek strangers (stranger-seeker). By conducting two surveys, we obtain an overall acknowledgement of stranger seeking behavior and give a portrait of stranger-seekers in social network sites. We find: stranger-seekers are extroversive, narcissism, in poor family relationship, motivated to seek belongingness, but without a larger proportion of strange friends. This finding may contribute to personal attractiveness oriented online product design.

Keywords: Social Network Site (SNS), stranger seeking, personality, relation quality.

1   Introduction

Internet has brought about great changes to human lives [1], and provides chances for meeting and interacting in a virtue space. Social network sites (SNSs) are social networking tools to generate online relationship and serve as compensation for reality, they are defined as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system [2]. SNSs have gained great popularity among the overall world since its birth. For example, Facebook, the largest SNS in the world, declared that they share more than 900 million registered users by 30th, June 2012, other popular SNSs include MySpace, Twitter, Google+, Renren (China), QQzone (China), etc.

Individuals have integrated SNS surfing into their daily practices. They flocked to social network sites for several reasons, among which a main one is to maintain the established relationships [2]. According to a survey conducted by Lenhart in 2009, nearly 90% of adults surveyed say they use online profiles to keep up with friends, while 57% say they use them to make plan with their friends, and 49% say to meet new friends. In a word, the success of SNSs in a large degree can be attributed to the capability to enlarge one's social network and encourage social interaction.

There is a growing body of evidence indicating that individual differences on personality factors are associated with SNS usage[3]. Guadagno and his colleagues con-

ducted two studies and indicate that people who are high in openness to new experience and high in neuroticism are likely to be bloggers[4]. Moreover, women high in neuroticism are more likely to be bloggers as compared to those low in neuroticism whereas no difference was found for men[4].While using SNSs, whereas neurotic individual hold an instrument orientation.

Extroversive people demonstrate more frequent SNSs use and communicative functions[5-6], have more friends, participant in more groups [5]. Individuals who scored higher on neuroticism are more willing to share personally-identifying information, spend more time in SNSs, be less likely to use private messages[5], and prefer the asynchronous methods of communication [6]. It has been found an interaction between agreeableness and gender. Female belong to low agreeableness group upload fewer pictures compared with those in high agreeableness group[7]. Individuals who scored higher on openness to experience tend to use Facebook as a communication tool and to use a greater number of features. Contrary to open people, conscientious people be more cautious in SNS activities (Ross, et al, 2009), reveal a larger number of friends due to high-target orientation[8].

Self-view and relationship quality may be another related factors. Naricissism indicates a over-high self-evaluation. The survey based on Facebook found that, compared to nonusers, Facebook users are more narcissistic, less likely to be conscientous, shy, or socially lonely, and they also have stronger feelings of family loneliness. In regards to narcissism, individuals with higher scores on exhibitionism also have higher preferences for Photos and Status Updates [6].

Besides family loneliness, family factors can also influence internet behavior. People with poorer family function cannot acquire proper emotion support and often involved in pathological internet use.

However, current research mainly focuses on the overall SNS behavior, and rarely exist research on some kind of SNS behavior, for example, there is lack of research on on-line friends seeking behavior. Meeting strangers on-line is among one of the most interesting experiences during SNSs usage. To meet netizen's needs of large social network and provide more chances for social interaction, some Chinese SNS service providers have expanded their market to mobile phone users and developed mobile APPs, such as Momo and KK-friend. Mobile APPs allow their users to search for strangers nearby and initiate close relationships immediately.

Given its market prospect and significance, it's a necessity to learn about the stranger seekers' behavior, motivation and characteristics. However, as far as we know, the knowledge of stranger-seekers is quite limited. We know little about (a) which types of people like to seek strangers; (b) how these people evaluate themselves; (c) their identification to SNSs; and (4) their ability of forming health relationship with others. Next, we will give an introduction of our exploration on stranger seeking behaviors and give a portrait of the stranger-seekers from the following perspectives: their personality, self-views, identification, relationship quality, etc. The expected findings will likely help SNS product designers to improve interaction designs and user experience. And this is the first try to make such an overall view of online friends seeking behavior.

2   Purpose

We categorized above factors into two types: personal factors and inter-personal factors. As to personal factors, we selected personality, self-view and identification as important elements. We examine the inter-personal factors from the family relation perspective. Prior research indicates family relation quality and family environments relates to unhealthy internet behavior, so we decide to explore whether stranger-seekers on-line come from families sharing high-quality or low-quality family relations.

3   Methods

We conducted two surveys. Survey one focused on personal factors while survey two continued to explore inter-personal factors.

3.1   Study One

There were 240 participants in survey one. All of them reported their SNS behaviors and identification on a revised Facebook Questionnaire[5], a 50-item Big Five Questionnaire [9] (α = 0.870) and the Narcissism Personality Inventory [10](α=0.791. Our subjects included users from the most popular Chinese SNSs including Renren, Weibo, QQzone, Douban.

Revised Facebook Questionnaire (RFQ)
The RFQ is used to measure personal identification to SNS and multiple SNSs behaviors. SNSs behaviors include participant's frequency of SNSs use,   searching strangers, the proportion of strangers among friends, and other necessary information.

The Big Five Personality Inventory (BFPI)
The BFPI[11] is a 44-item measure that consists of the following five personality factors: extraversion (e.g., ''I see myself as someone who is talkative''), agreeableness (e.g., ''I see myself as someone who likes to cooperate with others''), conscientiousness (e.g., ''I see myself as someone who does a thorough job''), neuroticism (e.g., ''I see myself as someone who can be moody''), and openness to experience (e.g., ''I see myself as someone who is inventive''). Each item was evaluated on a 5-point Likert scale, ranging from ''Strongly Disagree'' to ''Strongly Agree''. The BFPI has been shown to have satisfactory reliability and validity [12]. The internal consistency coefficient for each of the subscales is good: extraversion (a = .86), agreeableness (a = .79), conscientiousness (a = .82), neuroticism (a = .84), and openness to experience (a = .80).

Narcissism Personality Inventory
Narcissism reflects self-evaluation, especially a high evaluation, so we use the Narcissism Personality Inventory (NPI)-16 to measure self-view. NPI-16 has acceptable face, internal, discriminant, and predictive validity[13]. Example items include ''I am

more capable than other people'' and ''There is a lot that I can learn from other people.'' Higher scores on the NPI indicate a more narcissistic personality. Overall, the NPI-16 is both a valid and reliable measure that captures a range of facets of this construct, particularly in situations in which the use of a longer measure is impractical. Higher scores one NPI indicate unhealthy self-view.

Result and Discussion

According to the result, we found a significant correlation between extraversion and stranger seeking behavior(r = 0.194***), that is, extroversive people are more likely to seek strangers. This result is consistent with prior findings which indicate that while using SNSs, extroversive people are more likely to use the communicative functions of SNS[14] .

We also found a positive correlation between narcissism and stranger seeking, which indicates that people who value themselves high show more interests to others. This finding suggests that narcissistic people are not as self-centered as thought.

3.2   Study Two

Procedure

In survey two, 151 participants   (57 males, 94 female; mean age= 21.98, SD= 1.995) answered the same Facebook questionnaire in study one and a revised Relationship Quality questionnaire (Bartholomew & Horowitz, 1991, Griffin & Bartholomew, 1994;α= 0.815).

Relationship Quality Scale composes 17 items. The items in the scale are selected from Hazan and Shaver's (1987) attachment measure, Bartholomew and Horowitz's (1991) Relationship Questionnaire, and Collins and Read's (1990) Adult Attachment Scale and Griffin and Bartholomew (1994) Relationship Scales Questionnaire and revised to measure family relationship quality. The revised questionnaire included items like "I find it difficult to depend on my family" and share a high reliability (α= 0.815). Participants need to indicate the proper description of their family relationships on a 7-point scale. Higher score indicates better family relation quality.

Result and Discussion

In study 2, we found a significant negative correlation(r = -0.262**) between family relationship quality and the frequency of stranger seeking. That is, the poorer the family relationship, the stronger willingness of seeking strangers. Surprisingly, stranger seekers didn't have more strange friends: the correlation between strange friend proportion and strangers seeking behavior was -0.071, and the percents of stranger friends do not vary according to strangers seeking behavior (X2=10.678, p=0.099).

This result suggests when family interactions cannot meet one's need for dependence and intimacy, individuals will turn to strangers for emotional support. The correlation between identification and seeking behavior also supported this conclusion. Stranger-seekers hold a higher identification to the SNSs and are more afraid to lose the connection (see Table 1).

Table 1. Correlations result of the main varibles

	1	2	3	4	5	6	7	8	9
1. SNS_searchstranger	1								
2. SNS_friends_know	-.071	1							
3. SNS_life	.071	.159*	1						
4. SNS_lost	.151*	-.162*	365***	1					
5. SNS_belong	.166*	.036	.533***	.477***	1				
6. SNS_sad	.104	-.040	370***	.537***	.548***	1			
7. NPI	.176**	.021	.127	.094	.192**	.166**	1		
8. Extraversion	.227***	.036	.132*	.148*	.226***	.190**	.577***	1	
9. Family relation quality	-.262***	.171*	.084	.068	.003	-.009	-.094	.077	1

Note: * $p < .05$; *** $p < .001$.

4   Conclusion

According to the two large surveys, we found those who are extroversive, narcissism, in poor family relationship, motivated to seek belongingness on the SNSs, are most intended to search strangers on SNS for friends-making, but unfortunately, such seeking behavior does not lead to a large proportion of strange friends in their friends list.

   This result may due to the lack of actual friend applications or social attractiveness of stranger seekers. Although low relationship quality and extroversive individual did do more searching, but they may just search and scan others information but not submit friends application actually. So there is no difference between friends distribution. Another reason may be these individuals are less attractive. According to prior study, individual from dy-functional family often showed more psychological problems, such as passive, depressed, aggressive, sharing low self-esteem and subjective well-being. They are at a higher risk in communication disadvantage and are skilled in social interaction. So although they submit more friends' applications, they may also receive more rejection or fail to establish long-term connections.

   In a word, stranger seekers are extroversive, narcissism, in poor family relationship, motivated to seek belongingness on the SNSs, but without a large proportion of strange friends. The SNSs product manager should take these into consideration and come up ideas on how to display personal characteristics attractively.

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