

Social Exchange Online: Public Conversations in the Blogosphere

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Abstract

The increasing popularity of blogs brings the potential to change traditionally agreed upon norms regarding interpersonal communication due to the non-directed nature of self-disclosure inherent in blogging. This exploratory study investigates the relationship between bloggers' intended audience, content characteristics of their posts, and expectations for two primary interpersonal norms: reciprocity and equity. Results suggest bloggers who target their strong tie networks disclose a range of traditionally private, intimate content, and expect their readers to follow traditional interpersonal communication rules.

1. Introduction

"... rules as to who may and who may not observe or reveal information about whom, must be established in any stable social system."

~Schwartz [42], p. 742

People are constantly engaged in the management of access to public and private information about themselves. In this sense, people's boundaries of privacy which regulate diffusion of personal information are dynamic, fluctuating in permeability depending on the situation [37]. Communication technology is changing how people work [22] and play [9], and may also be impacting conceptualizations of privacy, private information, and other's access to this information. For example, both Altman & Taylor [1] and Derlega & Chaikin [12] conceptualize privacy as a *process* through which people control the exchange of information with others. Technology is facilitating an extraordinary proliferation of databases storing records associated with a broad range of human behavior [45], a boon to advertisers and marketers. The digital footprints people leave have become a heavily traded and valuable commodity.

In light of these technological changes and diffusion, we are also witnessing wide adoption of unique communication tools and services, including social network sites like MySpace and Facebook, as well as web logs (blogs), through which users are willingly and enthusiastically adding to their data body [cf. 10].

These tools share a set of common characteristics, including generally the presentation of personal information. In the context of social networking sites, this information typically includes things like where one lives, goes to school, favorite movies and books, etc.

Blogs enable access to nuanced personal information. For example, Herring, Scheidt, Bonus & Wright [21] examined a random sample of blogs and found that more than seventy percent were classified as personal journals where users posted content generally about their day to day lives, focusing on personal thoughts and feelings. Here, personal journals are employed as a metaphor given the personal, intimate nature of blog content. The difference, however, is clear: blogs tend to be public places, considering a recent PEW report suggesting more than 85% of blogs are open to others' comments [31].

Blogs are often used to maintain existing relationships, including those with close friends and family [46]. However, the asynchronous and broadcast nature of this technology may impact traditionally agreed upon norms and rules governing interpersonal interaction. Prior to the diffusion of web-based social tools like Facebook and blogs, people's social spheres tended to be geographically restricted and most often limited to one-to-one communication. Today, however, user's social spheres are potentially global. Technology facilitates ease of access to a growing corpus of personal information about people, and will force a renegotiation of rules guiding, for example, "letting people know... keeping in touch... and getting the word out" [39].

Obviously, norms and rules are important guides for establishment and development of various social relationships, from informal encounters [20] to intimate friendships [3]. Argyle, Henderson & Furnham [4] suggest that rules are created and changed to facilitate attainment of a wide range of situational goals. More recently, Walther & Bunz [49] explored the role rules play in distributed groups who depend on computer-mediated communication (CMC), suggesting that following rules *generally* facilitates uncertainty reduction and perceived trust among members. Clearly rules are important tools that guide interpersonal interaction, and need to be systematically explored in the context of new

communication technologies—like blogs—which change traditional sender-receiver communication dynamics.

While early research focusing on CMC addressed the reduced bandwidth capacity of CMC to predict subsequent content [38], and the potential for uninhibited, aggressive behavior due to a lack of normative pressure [29], the goal of this research is to explore the characteristics of self-disclosure via blogs in terms of intended audience, breadth of self-disclosure, and expectations for traditional interpersonal communication rules specifically with regard to the norm of reciprocity. In the context of this manuscript, posting to a publicly accessible blog is operationalized as *non-directed self-disclosure*, a novel form of interpersonal communication opposed to traditional dyadic exchanges. Given the personal and often intimate nature of blog posts, and the non-directed nature of their disclosure, questions arise regarding the nature of norms associated with accessing, acknowledging and responding to non-directed self-disclosures offered via blogs.

The following discussion first reviews literature and research on blogging, focusing specifically on audience and content characteristics. Next, a review of exchange theories is presented, with attention paid to the fundamental process inherent in both uncertainty reduction and social penetration theories—self-disclosure. This is followed by general research questions and specific hypotheses based on said review.

2. Literature Review

Maslow [32] was the first to identify a hierarchy of primary needs in terms of interpersonal communication motives which are central to communication processes because the realization of these needs is often a function of interpersonal relationships. A motive is a general “disposition which will influence actions that are expected to lead to a particular kind of consequence or goal” [6, p.14]. Thus, motives act as catalysts for behavior and can be activated by situational or environmental variables. For example, Stefanone & Jang [46] found that a blogger’s social context is a significant predictor of subsequent use of blogs. In their research, extraversion and self-disclosure traits predicted the social context of bloggers in terms of their strong tie network (STN) size (Figure 1), and that social context of users was operationalized as a motivating factor to use blogs as a tool to maintain said relationships. From a uses and gratifications perspective, one could argue that blogs afford reduction in costs associated with maintaining large STNs.

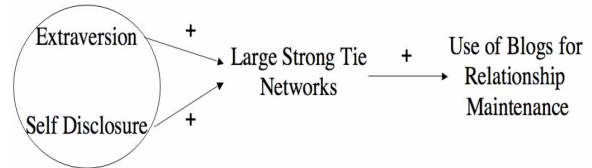


Figure 1. Model of individual differences, social context, and subsequent blog use.

Here interpersonal communication is goal directed to the extent we choose who we talk to, what we talk to them about, and how we talk to them [40]. However, the nature of communication processes may be affected when they are conducted via CMC channels due to the different choices these channels afford to both senders and receivers. One rapidly growing channel for interpersonal communication is blogging. Below is a review of extant literature on blogs, focusing on audience characteristics and content.

2.1 Blogs

Interestingly, there is no new technology associated with blogs. Rather, blogs are simply a reconfiguration of existing web-based tools— frequently updated web pages that generally have current and archived text-based posts. Most blogs are interactive, in that they afford visitors the opportunity to post comments [31], and have proliferated due to ease of use, a consequence of the wide variety of software applications and hosting sites available to users. These tools enable/empower anyone with access to a computer and the Internet to create and maintain a blog because little technical knowledge (i.e., html) is required. Although blogging tools afford different levels of privacy, ranging from password protected sites to publicly listed and accessible sites, the overwhelming majority of users do not restrict access to content [31].

Research on blogs suggests that hallmark features include format and content analogous to traditional journals. Schiano, Nardi, Gumbrecht & Swartz [41] conducted an ethnographic study of bloggers to explore the use of this technology for personal expression and communication, and suggest users were aware of their intended audience, and expected feedback from their audience through multiple communication channels, including face to face (F2F) and via comments to their blog entries, evidence of multi-modal communication. Here we see a deviation from the traditional concept of a diary—private, secure content—where bloggers are capitalizing on the interactive nature of the Internet, evident by the expectation for feedback. Surprisingly, the affordances of a hypertext medium are being incorporated and leveraged to disseminate traditionally personal, private information.

Nardi, Schiano, & Gumbrecht [36] suggest bloggers share the intention to maintain close relationships, consistent with Stefanone & Jang [46]. In terms of social network analysis, the most frequently measured aspect of relationships is tie strength, or intensity, an indication of how close the respondent reports they are to each network member [34]. Strong tie contacts are characterized by frequent, reciprocal communication and usually a long, stable history of interaction and constitute relationships with family and close friends. On the other hand, weak ties are characterized by infrequent communication, low reciprocity, and a lack of emotional closeness [16, 17]. Some individuals may have large ego-centric networks comprised of numerous weak-tie contacts, while others may have small ego-centric networks comprised of a few strong ties. Further, weak and strong tie proportions in ego networks are often a function of the time necessary to maintain those relationships. Stefanone & Jang [46] suggest that because strong tie relationships are more costly to maintain given their richness and intensity, there is a positive relationship between the frequency of these relationships and the motivation to use cost-reducing technologies like blogs to communicate with close friends and family. In this way, communication through blogs is designed to maintain existing relationships.

Nardi et al. [36] found that user's audiences were limited to close friends and family with whom bloggers continue their conversations through a variety of communication channels, including instant messaging (IM), email, phone and F2F. Using a variety of communication channels is expected given that communication with strong ties tends to be multi-modal [19]. More recently, a PEW study [31] found that roughly 12 million Americans maintain a blog, 57 million people read blogs, and again, the most popular category of blogs in terms of content is 'personal,' where authors document details about their individual life and experiences. There is also evidence that users present themselves accurately and realistically, and include content highlighting personal information about their sexual identity and intimate romantic relationships [25].

However, the topical breadth of disclosure via blogs remains unclear. The research presented herein provides an initial exploration of a range of personal information topics by examining the relationship between gender and intended audience characteristics, and a range of content categories emphasizing personal information.

Prior research suggests men and women communicate in different styles and for different social objectives [14; 47]. These gender differences were reported to be carried over to the cyberspace. For example, in their study of virtual communities, Gefen and Ridings [15] found that women, more than men, aim to provide and obtain social support in online communities. In online learning environments, there is evidence that

extant offline gender differences in communication style generally reproduce themselves when mediated by CMC technology [7]. Hamburger, Y.A., & Ben-Artzi's study [18] on personality and Internet use reported that, for women, extraversion was associated with making social contact, while, for men, it is linked to information and entertainment use of the Internet. Gender differences in terms of self-disclosure have also long been observed [35, 13]. Females were found to have higher tendency to disclose their emotions than males, particularly to their spouses and lovers [44]. Dindia and Allen's meta analysis concluded that females talked about themselves to their close social networks more than males did [13]. These differences suggest that gender should be taken into consideration when studying diary-style blogging.

In addition, considering communication as a goal oriented social activity, intended audience should play an important role in how people choose to conduct communication tasks for social objectives [39]. Evidence suggests that STN size is a significant predictor of using blogs to maintain strong tie relationships [46]. Bloggers with larger STN's use blogs as another mode of communication to support those relationships, potentially reducing the costs associated with the maintenance of said relationships. While these results suggest that for people with large strong tie networks the purpose of appropriating new forms of technology is to maintain relationships, they do not address issues relating to the *content* of communication via blogs. Building from these results then, the question becomes 'what topics are discussed within these strong tie networks?'

A final goal of the current research is to explore the extent to which traditional communication rules apply to this new form of CMC. Traditionally, social exchange is characterized by *directed* self-disclosure which is fundamental to the maintenance of successful relationships. However, recent evidence suggests that bloggers expect to maintain these relationships through *non-directed* self-disclosures via publicly available content posted to their blogs. The non-directed nature of disclosure raises questions about the shared understanding and expectations toward rule sets associated with interpersonal communication because of the traditionally *directed* nature of this process. The following section reviews literature associated self-disclosure in the context of social exchange theories and CMC.

2.2 Self-Disclosure and blogs

Self-disclosure is defined as the process by which someone provides personal information about their thoughts, feelings and/or needs to another person [2, 26]. Derlega & Chaikin [12] operationalize self-disclosure as a boundary maintenance tool much like Petronio's [37] conceptualizations of boundaries of privacy. Research on

relationship development suggests that relationships begin with superficial exchanges and over time include more personal information [1]. Further, the intimacy levels of self-disclosure tend to be equal [30], viewed as pleasing [43], and lead to higher levels of trust over time [27] among exchange partners. These studies demonstrate that self-disclosure is fundamental to relationship maintenance and development. Of particular interest to current study are Kleinke's [30] results which suggest that the intimacy of disclosures between people be equivalent, consistent with equity theory.

Equity theory suggests that people strive for some sense of 'fairness' in relationships [8]. For example, Davidson, Balswick & Halverson [11] suggest that equity in spousal self-disclosure is positively related to marital satisfaction, based on social exchange theory assumptions. Through the process of reciprocal self-disclosure partners try to maximize their rewards, so that said rewards outweigh costs. In this sense, equity theory grew from social exchange theory, with one modification: inequitable relationships result in distress. People who perceive inequity in a relationship will attempt to eliminate their distress by restoring equity. Restoration is achieved either psychologically (i.e., denial) or behaviorally (i.e., an extramarital affair).

It is important to note that perceptions and outcomes related to equity function in both directions. That is, both the over-rewarded beneficiaries of inequity and the victims of inequity experience distress [11]. Thus, one must measure the amount of disclosure received *relative* to that given. In the tradition of Homans [23, 24], this is based on a basic rewards-costs model, in that people seek to maximize rewards and minimize costs in social situations. Closely related is the concept of *distributive justice*, in that there should be perceived equity in the distribution of rewards and costs between relationship partners.

Homan's exchange theory suggests the obligation to reciprocate in an interaction. This reciprocity leads to equitable exchange [28]. On the one hand, people feel obligated to reciprocate personal information to 'pay' for the disclosures received. On the other hand, they expect to receive the same level of disclosure from their exchange partners after providing their own. Further, personalism reflects the notion that personal disclosures lead to liking because the recipient feels that he/she has been singled out as trustworthy and a good candidate for an intimate relationship [48]. This likely is an important variable to consider in the context of blogging because non-directed self-disclosure may circumvent the perception of personalism.

As outlined above, the tendency to self-disclose feeds additional disclosures from others through a reciprocity norm. This process of mutual and reciprocal self-disclosure is the mechanism through which relationships

develop and grow in intimacy [1]. Typically, self-disclosure is targeted in the sense that the discloser chooses a specific target, which conveys personalism. There are positive outcomes associated with directed, personal communication because, for example, when I choose to tell *only* you something, that signals to you that I trust you, value our relationship, etc. [48]. In fact, reciprocation is behavior which restores equity, due to the asymmetry created by initial self-disclosure.

3. Summary and Goals

Blogs are a very popular tool people use to document their personal thoughts and feelings, much like traditional journals. While bloggers have the expectation that friends and family will read and responds to the content they post, the nature of this interpersonal communication is novel in that blog posts represent a non-directed form of communication. From a social exchange perspective, this process calls into question commonly agreed upon rules and norms, like reciprocity and equity. The central goals of this research are 1] the exploration of the breadth of personal/intimate content categories for blog content and 2] the investigation of the extent to which normative rule sets, in terms of reciprocity and equity, have been preserved in one specific context of CMC: blogs.

4. Research Questions and Hypotheses

This exploration into content and rules begins by considering one major element of blogging: whether or not bloggers target their strong tie network when writing. Thus,

RQ1: What impact does intended audience have on content posted to blogs?

The evidence presented above suggests that many bloggers target STN's and disclose personal, intimate information. In an attempt to delineate more specifically the kinds of content, the coming analysis focuses on seven broad categories of private information. Because STNs are comprised of mature relationships, it is likely that communication with this network will be more personal and intimate, opposed to superficial, casual communication with weak tie acquaintances. Thus,

H1. Directing a blog at an audience of strong social network ties is positively associated with posting private, intimate content.

As noted earlier, there are a range of gender differences in CMC [14, 7]. Thus, we present the following research question:

RQ2: Are there gender differences inherent in this behavior?

Given what we know about strong tie contacts, one could predict that the content be more intimate in nature

because of the mature developmental stage of the relationships. However, there are questions regarding the roles traditional norms play in this environment. When people post to their blogs and their audience is a strong tie network those posts are likely in the form of mutually relevant self-disclosures. However, questions about communication rules persist. Thus,

RQ3: How influential are traditional interpersonal communication norms, like reciprocity, in a mediated, blogging context?

Following this general research question, we propose the following hypothesis:

H2. Directing a blog at an audience of strong social network ties will be positively related to bloggers' expectation for reciprocity.

Lastly, the following research question is posed to explore any possible gender differences:

RQ4: Are their gender differences in terms of normative expectations?

5. Method

To address these questions and hypotheses, the authors conducted an online survey of a sample of bloggers. The sample was produced by first examining several major blog hosting service sites, including *blogger.com* and *livejournal.com*. At the time of this study, only *blogger.com* offered a working random blog selection feature, which was determined by personal correspondence with the blog hosting sites. Using the random blog pointer on *blogger.com*, a list of one thousand unique blogs was generated. The authors then examined the list to select blogs appropriate for this study. Due to the focus of this project on active personal blogs by individual bloggers, the following types of blogs were excluded from the study: blogs with multiple authors, blogs containing pictures only, blogs with less than three posts on two different dates in the last three months, and blogs used strictly for commercial or organizational purposes (i.e., marketing particular products or office coordination services). In addition, blogs with authors younger than 18 years old were eliminated.

After the above restrictions, 700 qualified blogs remained. The authors then delivered a survey invitation to 622 of the 700 selected bloggers via emails or comments posted on their blogs. The other 78 bloggers did not provide their email address or the comment option on their blogs, and, therefore, did not receive the invitation. Qualified blogs were not visually inspected by the researchers.

Six weeks after the invitations were sent out, 154 completed surveys were received, which yielded to a 24.7% response rate. Among the respondents, 53.4% were male. The education level distribution of the respondents is as follows: about 10% had finished high

school, 18% had taken some college classes, about 40% held a bachelors degree, and 30% held a graduate-level degree. The respondents came from 32 countries. About one third came from the USA, about 30% came from Europe, 25% came from Asia and Australia, and the rest (about 12%) came from a variety of other regions.

5.1 Strong Tie Network Size

The size of participants' strong-tie network was obtained via participant's response to one question asking "How many close ties do you have?" where a close friend was explicitly defined in the question as "someone you have known for a long time, have frequent interaction with, and have positive feelings toward." It was also noted that these strong ties could include family members. Respondents averaged 7.6 ($SD = 7.1$) STN ties.

5.2 Intended Audience

This variable was created by combining responses to two questions. Participants were asked whether they agreed or disagreed with the following statements using 7-point Likert scales where 1 = "strongly disagree" and 7 = "strongly agree": 'My blog is directed at an audience of my close friends,' and 'My blog is directed at an audience of my family members.' These two items were combined to form the "STN audience" variable ($M = 3.57$, $SD = 1.85$) and demonstrated acceptable reliability (Cronbach's $\alpha = .74$). These two items were used in an attempt to thoroughly measure the two primary dimensions of a STN audience which may include both friends and family members.

5.3 Disclosure content categories

In an attempt to measure a wide range of personal information disclosure, seven content categories were created and included issues related to health, romantic relationships, sexuality, family relationships, religious beliefs, personal finances and politics. These are believed to encompass the breadth of personal information. The first five categories were also identified by Mathews, Derlega & Morrow [33] in their investigation of self-disclosure and personal information. Respondents were asked to rate how often they post each of these topics to their blogs using a 7-point Likert scale ranging from 1 = "never" and 7 = "always." This scale was used throughout the survey. Descriptive statistics for these variables are presented in Table 1, below. For the purposes of this exploratory study, these categories are treated as conceptually distinct elements, although it is clear from Table 1 that some of the categories are correlated.

Table 1. Descriptive Statistics for Content Categories.

	Mean(SD)	Pol	Rom	Rel	Hlth	Sex	Fin	Fam
Political Beliefs (Pol)	4.09 (2.10)		-.21**	.06	-.1	.12	.05	-.21**
Romantic Relationships (Rom)	3.66 (2.04)			.11	.26**	.11	.11	.17*
Religious Beliefs (Rel)	3.63 (2.10)				.34**	.33**	.29**	.05
Personal Health (Hlth)	3.46 (2.17)					.47	.48**	.14
Sexuality (Sex)	2.45 (1.95)						.49**	.02
Personal Finance (Fin)	1.98 (1.45)							.11
Family Issues (Fam)	1.64 (1.24)							

Note: N = 154; * = p<.05; ** = p<.01

5.4 Norms

An additional set of questions were asked to measure the extent to which bloggers maintained expectations for traditional rules associated with interpersonal communication. These items are limited to the norm of reciprocity, which is questionable due to the lack of personalism, as discussed above.

When considering the process of self-disclosure, stakeholders can be differentiated in terms of their roles. Participants in a communication exchange alternate between senders and receivers. In this study, we operationalize our participants as follows: bloggers who post content online are defined as ‘senders’; those same bloggers who read *other’s* online content then engage in the role of ‘receivers.’

If the traditional norm of reciprocity endures in the blogosphere, then we should see that senders, as well as receivers expect feedback from their audience (i.e., reciprocity). To measure this expectation, two 7-point Likert scale items were included in the survey.

The first item measured ‘If I disclose intimate information on my blog, I expect my friends and family to mention it.’ This was combined with an additional item, ‘If I reveal intimate information on my blog, I expect to hear intimate information from my readers,’ to form a variable measuring the expectation for reciprocity when initiating a ‘conversation’ as a sender (Cronbach’s alpha = .76; $M = 3.67$, $SD = 1.8$).

Recall that bloggers occupy a receiver role when they read someone else’s blog. The traditional reciprocity norm dictates that they provide feedback at a comparable level. To measure if the degree to which the bloggers are willing to observe this reciprocity norm as receivers, the following items were added: ‘If I read intimate information on a friend or family member’s blog, I would feel it is directed at me,’ and ‘If I read intimate information on a friend or family members blog, I would mention it to them in conversation.’ These items were combined to form the ‘motivation to reciprocate’ variable ($M = 2.63$, $SD = 1.4$).

Finally, to explore whether or not the expectation for equity persists in blog-mediated communication, an

additional pool of participants were recruited and asked explicitly about equity during a series of 4 focus groups. The participants were drawn from a large north eastern university undergraduate communication class, and as a prerequisite were required to actively maintain a personal-journal style blog.

Focus groups consisted of 5 participants each (n=20 total), and were approximately one hour in duration. Of the 20 participants, 12 were female, and the average age was 19.75 ($SD = .86$). Overall, these participants have been actively maintaining their blogs for 52 months, or roughly 4.3 years ($SD = 24$ months), and were primarily from the United States. The interview schedule focused exclusively on rules associated with self-disclosure and equity, and expectations related to these rules in the context of blogging.

6. Results

6.1 Intended audience and STN size

We begin by confirming part of the model presented in Figure 1. This model predicts that bloggers’ STN size is positively associated with their uses of blog to maintain their STN. Accordingly, the more family and close friends one has, the more likely his or her blog will be directed to them.

Distributions for all variables were checked for normality, and tests for homogeneity of variances were within acceptable limits. Only the network size variable was not evenly distributed, and one response- an extreme outlier, was replaced by the mean score for that variable. Overall, our sample reported an average of 7.56 strong tie relationships ($SD = 7.1$). A regression analysis was conducted to verify this prediction. The variable “intended for STN” was regressed on age, gender, education and STN size. The result shows that strong tie network size was the only significant predictor of intended audience $F(3, 151) = 2.62$, $p < .05$ ($\beta = .234$, $p < .01$) after controlling for age, gender and education. This confirms that as STN size increases, so too does the likelihood that bloggers target their STN.

6.2 Content categories, intended audience, and gender

Here we investigate the relationships between content category, intended audience, and gender. The descriptive data of posting on various personal topics is reported first, followed by the main effects of intended audience and gender. Finally, additional analyses were performed to explore the interaction effect between intended audience and gender on blog self-disclosure topics.

The survey asked respondents to report how frequently they post various personal topics to their blogs. Results showed that personal political beliefs received highest frequency rating among the seven topic categories. It was followed by issues related to romantic relationships, religious beliefs, personal health, and sexuality. Personal finance and family issues were the least frequently discussed topics for our blogger sample. See Table 2, below.

The relationships between the intended audience and posting frequency of various topics were examined via correlation analyses. The results showed that the more the bloggers direct their blogs to their STNs, the more often they disclose issues related to their family ($r=.47, p<.001$) and romantic relationships ($r=.36, p<.001$). On the other hand, posting about political beliefs is negatively associated with the intent for STN measure ($r=-.42, p<.001$). No relationship was found between intended for STN and the posting frequencies of other topics. H1 is partially supported. See Table 2, below.

In terms of gender differences, for exploratory purposes it is worth mentioning that overall female bloggers reported higher frequency of posting in all content categories than male bloggers, except for political beliefs. However, not all differences were statistically significant. ANOVA analysis showed that, only for personal health related issues, men and women differed statistically significantly. Female bloggers reported posting more often about health issues than male bloggers $F(1, 147) = 8.34, p < .01$.

Gender differences and the tendency to direct blogs toward STNs were also examined. While female authors on average were more likely to target their close friends

and family, the difference between genders was not significant.

Further, correlation analyses were applied to both the male and female subgroups to examine the relationships between content categories and the intended for STN variable. The results are reported in Table 2. The general trends between intended for STN and the posting frequencies of family issues, romantic relationships, and political beliefs maintained the same for both men and women. In addition, targeting a STN is positively associated with posting about personal health and finance issues among male bloggers. For female bloggers, on the other hand, the more they focused on their STN, the less likely they wrote about their sexuality and financial situations.

Overall, intended audience seems to exert influence on bloggers' posting of various topics. In particular, people tend to post more about their family issues and romantic relationships when they direct their blogs to their close friends and family. However, the opposite trend was observed with political beliefs. People are less likely to write about politics when their intended audience is their close tie networks. This is presented as partial support for hypothesis 1.

6.3 Norm of reciprocity

Results of a correlation analysis showed that the more a blogger targets their STN, the more they expect to hear back from the readers ($r=.17, p<.05$) and the more they are subject to the reciprocity norm as a reader ($r=.26, p<.01$). This is presented as support for hypothesis 2.

Additional ANOVA analyses with gender as the between group variable were conducted to explore differences with regard to the reciprocity norm. Results suggest that female bloggers reported a higher expectation to hear back from their audience, $F(1, 145) = 5.43, p<.05$. This is consistent with prior research suggesting women are more likely to seek social support [15]. No significant difference was found between genders regarding the degree to which they are motivated to honor the norm of reciprocity when reading blogs authored by in their STN contacts.

Table 2. Correlations between Content Categories and Intended Audience of STN.

	Pol	Rom	Rel	Hlth	Sex	Fin	Fam
Female (N = 68)	-.46***	.24*	-.16	-.14	-.33**	-.26*	.52***
Male (N=80)	-.44***	.43***	.11	.32**	.07	.25*	.56***
All (N=154)	-.42***	.36***	-.02	.10	-.12	-.01	.47***

Note: *= $p<.05$, **= $p<.01$, ***= $p<.001$

6.4 Equity

Results from the focus groups suggest that the expectation for equity in blog-mediated communication persists, as well. For example, one line of questioning explored bloggers' expectations for replies to posts they put a great deal of effort into (i.e., a long post with a significant amount of self-disclosure). When asked about expectations for responses to posts like these, Michael (pseudonym), a 20 year old Communication major responded, "Regardless of the length of the reply at least you are being acknowledged, even if it is just a short response to a long post. I guess I would prefer any type of response, if I am putting energy into it. Of course, the lengthy replies I have gotten are much more valuable and meaningful to me."

Nicole, a 21 year old, commented "I remember posting this really long entry one time. One of my close friends left a comment that said, 'cool.' And I was so upset, I called him up and said, 'what, that's all you have to say after all I told you?'"

The focus group participants time and again responded in a similar fashion. However, they did not indicate that they expect an equitable response to be made in the form of a post to their blog. Participants were indifferent in terms of the mode of reply, whether it is via email, a phone call, or a reply to their original blog post.

7. Discussions and Conclusion

This study is the first step in an attempt to understand the increasingly popular use of blogs for self-disclosure and interpersonal communication. Building from a social exchange perspective, we investigated the content as well as the norms associated with this new form of self-disclosure while situated it in specific social contexts including gender and intended audience. Several valuable lessons were learned in this study.

First, both blogger's gender and intended audience are influential factors for blogging in terms of thematic content. Our results show that bloggers in general posted more often about family issues and romantic relationships when blog target STNs. This indicates that close social ties may provide better psychological or emotional support than is usually available via casual acquaintances and romantic relationships.

The effects of blogger's gender are evident in the data. Our analyses suggest that females tend to reveal more about their personal issues than males in general. This is consistent with the literature [13]. However, except for health related issues, gender differences were not statistically significant. More research is needed to further explore these findings.

One noteworthy finding is the moderating effect gender has on the relationship between intended audience

and posting frequency for a range of topic categories. Among male bloggers, targeting STNs is associated with increased posting frequency about personal health and finance related issues. On the other hand, female bloggers targeting their STNs reported lower posting frequency regarding sexuality and personal finance issues. These results suggest that STNs as target audiences do not uniformly facilitate self-disclosure. For some topics, writing for a STN may even discourage female bloggers' self-disclosure.

These trends suggest that the boundaries of STNs are meaningful in the context of personal-journal style blogs. However, we should note that this audience boundary is an imaginary one. Most bloggers did not set access restriction to their blogs, so posts on various personal accounts are accessible to not only bloggers' intended audience but also anyone else. This suggests that the utility of choosing one's STN for an audience serves not to filter out an unintended audience, but rather to create a desirable social setting for the bloggers to base their self-disclosure decisions. From this perspective, we may begin to understand the rare use of features limiting access to blogs.

This study also focused on the norm of reciprocity. Equitable social exchanges are fundamental to the development of interpersonal relationships. The non-directed nature of blogs presents unique challenges for self-disclosure situated in relationship development and maintenance contexts. In this new communication milieu, it is not immediately clear whether or not people should expect the same reciprocity norms to be followed by all exchange partners. Overall, the average scores for the expectation of feedback and the motivation to reciprocate are 3.70 ($SD = 1.79$) and 3.19 ($SD = 1.37$), respectively. Both are close the midpoint of the 7-point Likert scale which may indicate that bloggers as a whole have not yet achieved a consensus regarding whether or not to maintain the traditional norm of reciprocity when using blogs for interpersonal communication.

Additionally, STNs play an important role in how people perceive the norms of reciprocity in the blogosphere. Evidence suggests that bloggers who target their STN are motivated to honor the norm of reciprocity, and expect others to do the same. This suggests that normative pressures originating in off-line social networks hold fast online. These findings are consistent with the evidence reported above, and reflect bloggers motivation to use this form of CMC to maintain extant relationships.

The expectation for equity in communication exchanges seems to hold in the blogosphere, as well. The focus group participants indicated they do have an expectation for equity in terms of responses from their audience. However, there seems to be an understanding that said responses can be transmitted through a wide variety of communication channels. However, due to the

lack of personalism, many questions remain. For example, the relationship between the volume (i.e, length) of a response and the perceived ‘quality’ of responses remains unclear. It would be worthwhile for future research to investigate how these processes play out over time, and further illuminate what impact perceived personalism has on the quality of relationships over time.

This study applied a body of established research on interpersonal communication to explore social exchanged in the context of non-directed self-disclosure. Future research would benefit by focusing on the actual content of communication exchange via blogs and the applicability of other well understood interpersonal phenomena to ‘public’ conversations in the blogosphere.

8. References

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