

Online Lurkers Tell Why

Blair Nonnecke
University of Guelph
nonnecke@uoguelph.ca
Dorine Andrews
University of Baltimore
dandrews@ubalt.edu

Jenny Preece
University of Maryland Baltimore County
preece@umbc.edu
Russell Voutour
University of Guelph
rvoutour@uoguelph.ca

ABSTRACT

A Web-based survey of 375 Microsoft Network (MSN) online communities was undertaken to investigate why people do not publicly participate in online discussion groups, i.e., lurk. The most popular reason for lurking, “just reading/browsing is enough”, was noted by more than half of the lurkers (53.9%). Apparently, many lurkers get their needs met through observation rather than public participation. The next but much less prominent reason for lurking is “still learning about the group” (29.7%). For many respondents lurking may be an initial temporary period of non-posting, and that once this period is over, they may begin to posting. Most importantly, based on the finding that only 13.2% of lurkers indicated they were “going to lurk from the outset”, lurking can be a product of the community interaction itself. Implications for future research are drawn and specific suggestions for managing lurking and developing better community tools are proposed.

Keywords

lurker, poster, free-rider, delurking, survey, online community

INTRODUCTION

For the most part, the study, management, and technical development of online communities have focused on supporting those posting in the public spaces. However, non-public participants (aka lurkers) are a large portion of some online communities (Katz, 1998; Mason, 1999; Nonnecke, 2000). Some community managers and participants demand that lurkers publicly participate and lurking is often perceived negatively as in one case where researchers described lurkers as free-riders (Kollock & Smith, 1999). Additionally, lurkers are not always comfortable with their lurking and are frequently less comfortable with it than posters (Nonnecke & Preece, 1999; Nonnecke, Preece, & Andrews, 2004). The implication is that lurkers’ non-public participation somehow affects communities in a negative way, reducing the development of social capital and by free-riding on other participants’ postings.

In a more positive light, the term “vicarious learner” has been coined to describe lurkers in educational settings (Cox, McKendree, Tobin, & Lee, 1999; Lee, McKendree, Dineen, & Mayes, 1999; McKendree, Stenning, Mayes, Lee, & Cox, 1998). In this setting, lurking appears to be a fruitful way of participating, one in which lurkers may achieve similar levels of learning to posting students.

As an author and an administrator of an online technical community, Katz (Katz, 1998) found that lurkers are less hostile than those who post, more tolerant to open discussion, and technically sophisticated. He also came to understand that they are uncomfortable with the tone and hostility of some public forums, and believe that the values espoused in public forums are widely held and they are alone in their opinions, i.e., isolated. Lurkers who would like to post requested moderated discussions that ban anonymous posting and personal insults.

Until recently (Nonnecke & Preece, 2000a, 2000b, 2001; Rafaeli, Ravid, & Soroka, 2004; Takahashi, Fujimoto, & Yamasaki, 2003), a research-based understanding of lurkers and their value to online communities has gone largely unstudied and often times misunderstood. In Nonnecke and Preece’s study of why lurkers lurk (Nonnecke & Preece, 2001), 10 participants provided 79 reasons for lurking with at least half of the participants stating the following reasons for lurking:

- Wanted to be anonymous, and preserve privacy and safety
- Had work related constraints, e.g., employer did want work email address to be used
- Had too many or too few messages to deal with, i.e., too many messages was burdensome, and it was easy to forget low traffic groups

- Received poor quality messages, e.g., messages were irrelevant to topic or had little information value
- Were shy about public posting
- Had limited time, i.e., other things were more important

To validate this earlier research, an assessment of a larger population of lurkers and posters was needed. Additional insights into whether lurkers can be more effectively supported through group/community management and/or technology were also needed.

METHOD

A diverse cross section of online discussion board communities was chosen using a sampling frame from which a stratified random sample was drawn (Andrews, Nonnecke, & Preece, 2003). This population of communities was further defined using size, access and activity criteria. The community had to contain more than fifty members, be open to public participation, and be an active online community with 4-5 people posting within the past 90 days. Of the 1304 communities meeting these criteria, 375 were randomly selected from the following categories: health and wellness, government, sports & recreation, and organizations. The survey (from now on referred to as the Lurker Survey) was conducted between March and July 2002.

The Lurker Survey consisted of 12 demographic items, 28 primary coded questions integrated with 20 secondary coded and open-ended questions. A pilot test was conducted to ensure that the questions were unambiguous and that there were no technical errors that would impede data collection. The survey invitation was posted as a message on the selected online discussion groups. Two follow-up “reminder” invitations were posted one week apart to all groups. All inquiry email, whether sent as a reply to the posting or sent to the survey “webmaster” was responded to within 24 hours. When a discussion board rejected an invitation posting another random number was generated and the process of posting was initiated with the newly selected community. The initial posting was rejected in only 18 cases.

1188 valid responses were received from the survey and the overall response rate to the survey was 2.3%. Although this response rate may be perceived as low, the results are satisfactory because: 1) the total number of valid responses was high and 18.4% were from lurkers (i.e., 1188, averaging 3 responses/online community); 2) the survey topic was not salient to respondents’ interests; 3) there were no financial incentives for participating, and 4) the researchers were unknown to respondents. The 79 reasons for lurking that were gathered in the earlier research (Nonnecke & Preece, 2001) were distilled into a succinct set of questionnaire choices in the Lurker Survey:

Q: If you never post to this online group/community, what are your reasons?

- Just reading/browsing is enough
- Want to remain anonymous
- Shy about posting
- Others respond the way I would
- Had no intention to post from the outset
- If I post, I am making a commitment
- Nothing to offer
- Wrong group for me
- Do not know how to post to this group
- Still learning about the group
- There are too many messages already
- Poor quality of messages or group/community
- No requirement to post
- Group treats new members badly
- Concern about aggressive or hostile responses
- Long delay in response to postings
- Of no value to me
- My work does not allow posting
- Not enough time to post

Respondents could choose one or more of these choices. Additionally, participants could enter their own reasons for lurking through a text box.

RESULTS AND DISCUSSION

In Nonnecke and Preece (Nonnecke & Preece, 2001), six reasons for lurking were mentioned by at least half of the ten study participants. These reasons were incorporated into the Lurker Survey questions and the response rate from lurkers is shown in Table 1.

Most cited reasons for lurking (Nonnecke & Preece, 2001)	Level of agreement from lurkers in Lurker Survey (% lurkers, n=219)
Were shy about public posting	28.3
Wanted to be anonymous , and preserve privacy and safety	15.1
Had limited time , i.e., other things were more important	9.1
Received poor quality messages , e.g., messages were irrelevant to topic or had little information value	7.8
Had too many or too few messages to deal with, i.e., too many messages was burdensome, and it was easy to forget low traffic groups	4.6
Had work related constraints , e.g., employer did not want work email address to be used	4.1

Table 1: Lurkers' rating of reasons for lurking identified from the previous study.

Surprisingly, none of the reasons from the previous study ranked above the 50% level for the Lurker Survey and four of the six were cited by less than 10% of the respondents. This reinforces the importance of good sampling techniques for online surveys.

Table 2 summarizes lurkers' responses to the primary question of why they did not post. The most frequently selected reason for lurking; "just reading/browsing is enough" was noted by more than half of the lurkers (53.9%). Apparently, many lurkers get their needs met through observation rather than public participation. This suggests that good tools for reading, finding and browsing community information are needed to support lurkers. It may also suggest that when these tools work well, lurking levels may be higher than in community environments where they are poorly implemented and hard to use. In less rich lurking environments, lurkers may become leave-takers, as their primary needs may not be easily met.

Why lurkers did not post	Level of agreement (% of lurkers, n=219)
Just reading/browsing is enough	53.9
Still learning about the group	29.7
Shy about posting	28.3
Nothing to offer	22.8
No requirement to post	21.5
Want to remain anonymous	15.1
Others respond the way I would	18.7
Had no intention to post from the outset	13.2
Of no value to me	11.0
Not enough time to post	9.1
Poor quality of messages or group	7.8
Do not know how to post to this group	7.8
Wrong group for me	7.3
Long delay in response to postings	6.8
Concern about aggressive or hostile responses	5.9
There are too many messages already	4.6
If I post, I am making a commitment	4.1
Group treats new members badly	1.4
My work does not allow posting	1.4

Table 2: Why lurkers did not post

The next but much less prominent reason for lurking is “still learning about the group” (29.7%). This suggests lurking may be a temporary period of non-posting when joining a group, and that once this period is over, lurkers may begin posting. Also, it supports the notion that tools and learning about the group are important to public participation. Getting to know a group encompasses a wide variety of issues, which can be supported directly through moderation and making information available. It may also be done through observation, and if this is the chosen approach, it may just take time. This puts low volume lists at a disadvantage, especially if they do not archive postings, as the paucity of messages can make learning about the group more difficult. This also ties in with the fourth ranked “nothing to offer” explanation (22.8%). For some, getting to know the group may be a first step to finding out what one has to offer to the group.

Of note is that only 13.2% of lurkers indicated they were going to lurk from the outset. This implies that the majority of people become lurkers through their interaction with the community. If the goal of the community and tool builders is to engender public participation and/or retain lurkers, support for lurkers needs to be improved.

The third most cited reason, “shy about posting” (28.3%), suggests that self-confidence is important in presenting oneself in online communities and methods for building self-confidence need to be explored.

Given these findings, the issue that emerges is ‘do we want to support continued lurking or reduce lurking?’ Techniques for either could be made available. For example, to reduce lurking one could include special side forums in which new members can exchange information with one another or contact others with more experience. It also suggests that groups take on the responsibility of developing roles and responsibilities within the community that support confidence building, e.g., tools for members to find other members “in the know”, custodians of information specifically designed for new members, and mentors willing to get to know, support and introduce members to a community. These techniques are obviously not

appropriate for all communities, and mechanisms for distributing this type of community work would need to be investigated, especially in large or diverse communities.

Related to possible roles – either tacit or explicit – within a community is the responsiveness of the community to new members, i.e., the role of the archetype greeter. In the previous study (Nonnecke & Preece, 2001), a number of participants observed responses from other community members to new posters. Their reason for doing so was to judge the receptiveness of the community, often to their own first post (aka delurking). In a study of lurking in discussion lists, Nonnecke (Nonnecke, 2000) discovered that lurking rates are significantly higher in communities that do not respond to new posters. In apparent contradiction to this are the findings from the current study; only 1.4% of the lurkers indicated they did not post because the “group treats new members badly”. The differences between these results may be explained by the phrasing of the Lurker Survey selection choice. It asks if the respondent’s community treats new members badly rather than asking whether treatment of new members is a cause for posting or lurking.

Of particular note in the findings is that 7.8% of the lurkers were unable to post because they did “not know how to post to the group”. In the previous study (Nonnecke & Preece, 2001), this was not noted as a problem; not finding this is likely due to the earlier participants belonging to technically well-versed university communities. While a 7.8% tool usage failure rate may not seem high, it nonetheless suggests usability studies are needed and that learning materials may also be helpful. It may be that tool failure for posting will vary among communities and their audiences, e.g., non-technically sophisticated communities may be more affected, which suggests that community managers need to understand the capabilities of both their audiences and the community tools chosen for the community. This may be an issue for any predefined community structures such as those found in MSN communities. In any case, it is an important community design issue.

As stated earlier, only 13.2% of the lurker respondents intended to lurk from the outset. This suggests that lurking is either a post-joining adaptive strategy where needs may be met through activities such as reading/browsing, or members become lurkers in direct and sometimes negative response to the community and to a lesser extent the communication technology. The following reasons and percentages are suggestive of this:

Value of Participation:

- Nothing to offer (22.8%)
- Others respond the way I would (18.7%)

Community Mismatch:

- Of no value to me (11%)
- Wrong group for me (7.3%)

Quality of Community:

- Poor quality of message or group (7.8%)
- Long delays in response to postings (6.8%)
- Too many messages (4.6%)
- Group treats new members badly (1.4%)

Technology:

- Don’t know how to post (7.8%)

There appear to be two sides to this: the first suggests a mismatch between member and group, while others indicate that quality of the community leaves something to be desired. In either case, lurking is a consequence and one that could lead to the lurker leaving the group.

Another response with a relatively high value was: “no requirement to post” (21.5% response rate). This suggests the implicit or explicit rules of the community are known and understood. However, it is not clear how community members understand these, e.g., by transferring their experience with other communities or reading FAQs and other information about the current community. It is likely that community members do not read the “rules” of their community, much like casual users of software prefer to experiment with the software rather than consult the manual. This is even more likely as community members can observe situated social activity, whereas software end users typically solve problems through the manipulation of tools and artifacts.

With regard to “others will respond the way I would”, 18.7% of the lurkers responded positively. This implies that these lurkers know their communities well enough to understand that others will support the ongoing dialogue. This can be

construed as a good thing, especially in high volume discussion lists, where communication overload can be a problem when receiving messages in an email client. Overload is even more burdensome on Web-based email clients where the user interface and tools available may not be as rich, e.g., in their ability to filter messages and manage threads. It is likely that coming to know that others will respond is not an instantaneous understanding, but one that comes over time. Shortening the time it takes to gain this understanding could be realized through tools that show participation levels and expertise of other members. Another way is to know about previous topics of conversation, either through observation or through an archive mechanism. Effective archive search mechanisms can be an important way of knowing about the community's topics of interest. Of course, in small communities, and those that receive few posts, holding back from posting in this way can damage the community. People tend to leave if there isn't new material to keep them engaged.

The Lurker Survey did not have the capability of automatic question skipping based on prior answers. As a result, 182 posters responded to the question of why they never posted, even though the question specifically stated that only non-posters should respond. While these responses could be mistakes, it does suggest that at the time of the survey some avowed posters thought of themselves as non-posters (i.e., lurkers).

SUMMARY AND CONCLUSIONS

We compared the reasons that lurkers gave for lurking with those that we had identified from our previous work (Nonnecke, 2000; Nonnecke & Preece, 2001) and discovered that the reasons differed considerably. The most important reasons given in the previous study were not important to the participants of this study. We believe these results can be attributed to two things. First, the small sample of participants in the previous study were taken from a university environment and second, they were not typical of the population at large. Indeed the reason for doing the present study was to see if these results applied to a large diverse population of Internet users. A second reason maybe that, despite pilot testing the Lurker Survey questionnaire, one of the key questions may have been confusing. In this study a variety of reasons for not posting were offered, including: it's enough to just read, still learning about the group, shyness, nothing to offer, and no requirement to post.

Lurkers indicated that "reading/browsing is enough" was their top reason for their lurking. This was followed by "still learning about the group", "shy about posting" and "nothing to offer". Perhaps most interesting, it appears that lurking is a habit that is developed rather than a conscious decision from the outset. Although almost four times as many lurkers start out not intending to post, others decide not to post as a result of their experience in the community. Why this change of heart occurs is not known at present but understanding this phenomenon will enable us to design software to better support community members and also to provide appropriate social support. We believe that providing better support for information searching will benefit both posters and lurkers. Similarly, both want privacy and security. The degree of this need is likely to depend on the type of community. For example, it is conceivable that participants in a health support community are going to be more sensitive about their profiles and messages being secure and private than members of a dog-lovers community. Our future work will compare lurkers and posters attitudes and behaviors across the four types of communities surveyed: health and wellness, government, sports & recreation, and organizations.

In addition we intend to do semi-structured interviews with members from these communities. Some questions to which we will seek answers include:

- "Did you intend to post when you joined the community?"
- "If so, why?"
- "If not, why not?"

We will then probe to get as much information about the fears and expectations of the participants so that we can construct a focused questionnaire, which will also ask the participants about their reactions to support structures such as:

- Would you like a newcomers' area?
- Would you like a mentor to introduce you to the community?
- Would stronger/weaker moderation make you feel more comfortable?
- If we could guarantee that your message/personal details would not remain accessible on the system would this alleviate your fears about the need for privacy?
- If you could find out more about the community members would that encourage you to post? Etc.

We believe that future research needs to feed software development and the formation of social support processes that provide two types of support for lurkers and posters. One type of support should cater to the information searching needs of both lurkers and posters. Another type of support should aim to make those lurkers who want to post feel sufficiently secure within the community so that they can participate. Yet another type of support should help community managers and

moderators to evaluate the ‘health’ of the community so that they can encourage lurking and posting behavior that supports the overall well-being of the community. For example, when is it advantageous to have more lurkers and when is it advantageous to have fewer? We believe that it is important to treat the issue of lurking with a certain amount of sensitivity rather than trying to make lurkers delurk.

ACKNOWLEDGEMENTS

Olga Heifets, Georgetown University Graduate student in the School of Communications, Culture and Technology, provided invaluable work on the data analysis and Greg Morton, UMBC Graduate Assistant, administered the survey. We are grateful to both of them for their help.

REFERENCES

1. Andrews, D., Nonnecke, B., & Preece, J. (2003). Electronic survey methodology: A case study in reaching hard-to-involve Internet users. *International Journal of Human-Computer Interaction*, 16(2), 185-210.
2. Cox, R., McKendree, J., Tobin, R., & Lee, J. (1999). Vicarious learning from dialogue and discourse: A controlled comparison. *Instructional Science*.
3. Katz, J. (1998). *Luring the Lurkers*. Retrieved March 1, 1999, 1999, from <http://slashdot.org/features/98/12/28/1745252.shtml>
4. Kollock, P., & Smith, M. (1999). Chapter 1. Communities in Cyberspace. In M. A. S. P. Kollock (Ed.), *Communities in Cyberspace* (pp. 3-25). London: Routledge.
5. Lee, J., McKendree, J., Dineen, F., & Mayes, T. (1999). Learning vicariously in a distributed environment. *Active Learning*, 10(July), 4-9.
6. Mason, B. (1999). *Issues in virtual ethnography*. Paper presented at the Ethnographic Studies in Real and Virtual Environments: Inhabited Information Spaces and Connected Communities, Edinburgh.
7. McKendree, J., Stenning, K., Mayes, T., Lee, J., & Cox, R. (1998). Why Observing A Dialogue May Benefit Learning: The Vicarious Learner. *Journal of Computer Assisted Learning*, 14(2), 110-119.
8. Nonnecke, B. (2000). *Lurking in email-based discussion lists*. Unpublished Ph.D., South Bank University, London.
9. Nonnecke, B., & Preece, J. (1999, Jan. 22-24). *Shedding light on lurkers in online communities*. Paper presented at the Ethnographic Studies in Real and Virtual Environments: Inhabited Information Spaces and Connected Communities, Edinburgh.
10. Nonnecke, B., & Preece, J. (2000a). *Lurker Demographics: Counting the Silent*. Paper presented at the ACM CHI 2000 Conference on Human Factors in Computing Systems, The Hague.
11. Nonnecke, B., & Preece, J. (2000b). *Persistence and lurkers: A pilot study*. Paper presented at the 33rd Hawaii International Conference on System Sciences, Maui, Hawaii.
12. Nonnecke, B., & Preece, J. (2001). *Why lurkers lurk*. Paper presented at the Americas Conference on Information Systems, Boston.
13. Nonnecke, B., Preece, J., & Andrews, D. (2004). *What lurkers and posters think of each other*. Paper presented at the HICSS-37, Maui, Hawaii.
14. Rafaeli, S., Ravid, G., & Soroka, V. (2004). *De-lurking in virtual communities: a social communication network approach to measuring the effects of social and cultural capital*. Paper presented at the Proceedings of the 37th Hawaii International Conference on System Science - 2004, Big Island, Hawai'i.
15. Takahashi, M., Fujimoto, M., & Yamasaki, N. (2003, November). *The active lurker: influence of an in-house online community on its outside environment*. Paper presented at the Group 2003 International ACM SIGGROUP Conference on Supporting Group Work, Sanibel Island, Florida.