What lurkers and posters think of each other

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Abstract

This study reports the results of an online survey that generated 1188 responses from 375 online MSN communities. The survey examined the behavior and attitudes of participants who post (i.e., posters) and those who read but do not post (i.e., lurkers). The results of the analysis indicate that posters and lurkers go online for similar reasons. While lurkers did not publicly ask questions, they wanted answers to questions (62.1% vs. 70.3% for posters). However, lurkers were less enthusiastic about the benefits of community membership, with 41.8% indicating they received less than the expected benefit. In contrast, 36.6% of posters perceived a greater than expected benefit.

1. Introduction

Managers of online communities and e-commerce entrepreneurs would like to entice non-public participants (aka lurkers) to become active posters and thus ensure vibrant communities that help promote sales and product knowledge [1]. Surprisingly, there has been little research on lurkers, who by many reports make up a large portion of some communities [2, 3].

Until publication of our earlier work [4-6] online community researchers either showed little interest in lurkers, preferring to focus on those who actively post, or believed that lurking should be stopped. Many regarded posters as the community; others took the view that lurkers were free-riders who drained the community of its social capital by taking and not giving back. Some people in the business community, had the goal of stopping lurking by encouraging or even forcing lurkers to be visible. In our earlier work we portrayed lurking in a more positive light. Interviews with lurkers and participants revealed that lurking was important in getting to know a community [3] We also discovered that many lurkers thought of themselves as community members; a notion that the study reported in this paper explores and which has surfaced in ethnographic interviews about community dynamics [7] and the features of successful online communities [8,9]. Furthermore, these same studies suggest that community members may hold more favorable views of lurking than is often assumed.

Lurkers are believed to far out-number posters. A survey by a computer-consulting firm in Chicago found that 98% of the visitors to large sites with open forums, such as AOL, MSN, and Slashdot, never submit ideas or articles and never post opinions or participate in arguments [10]. This schism between people who post and those who don't is a significant issue for public Web sites for all sorts of reasons, ranging from the commercial to free speech. However, our earlier research showed that lurking levels are considerably higher in some communities than others. When lurking was defined as 'no messages during a three month period', 48% and 84% of community members in 77 online health and 21 online technical support communities respectively, were found to be lurkers [3, 4]. We also found that lurking varied in relation to other community variables such as: size of the community, frequency of posting and number of single messages.

The study reported in this paper builds on our earlier work. The aim of this study is to throw some light on lurkers' attitudes, and the attitudes of lurkers and posters to each other. Another aim is to gain a much broader perspective by surveying a large number of members from a broad variety of different types of online communities. Building on previous research on lurkers [3,4], a web-based survey of 375 Microsoft Network communities was undertaken [11].

In this paper we start by discussing our methodology and then examine and discuss the results. The paper ends by drawing some general conclusions, suggesting some strategies for managing lurking, and raising issues for future research.

Table 1. Participant attitudes

Note: Chi-square analysis, P value for.05, or 5% margin of error	
Research Question	**Finding**
1. Is the primary reason for joining an online community different for lurkers and posters?	Both join for personal reasons. (P<0.162)
2. What are the main attractions to the online community and are lurkers and posters attracted to online community for different reasons?	Both come to get a general understanding; significant difference for 10 out of 14 attractions.
3. Why do lurkers not post?	Many and varied reasons were given for not posting with "just reading/browsing is enough" topping the list.
4. Is lurking affected when the community has an offline presence?	An offline presence has no significant affect on lurking. (P<.145)
5. Do the online communities meet the expectations of lurkers and posters?	Posters feel their needs are better met. (P<.001)
6. Do lurkers and posters perceive different levels of benefits from their community?	Posters perceive more benefit. (P<.001)
7. Do lurkers and posters differ in whether they feel like members of their online community?	Lurkers can feel like members, but posters feel a greater sense of membership. (P<.001)
8. Do posters and lurkers view members who post differently?	Lurkers have less respect for posters. (P<.001)
9. Do posters and lurkers view lurker membership differently?	Posters consider lurkers to be members more than lurkers do. (P<.001)

2. Method

A diverse cross section of online discussion board communities was chosen using a sampling frame from which a stratified random sample was drawn [11]. 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. A random number generator was used to select communities from the following MSN named categories: health and wellness, government, sports & recreation, and organizations. This produced 375 online communities from a total of 1304.

The survey, consisted of 12 demographic items, 28 primary coded questions integrated with 20 secondary coded and open-ended questions. A pilot test was performed to ensure that the questions were unambiguous and that there were no technical errors that would impede data collection. Invitations to participate in the survey were posted as messages on the selected online discussion groups. Two follow-up "reminder" invitations were posted one week apart to all the 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.

The survey received 1188 valid responses of which 18.4% were lurkers, which we defined as: members who had never posted in the community at any time. This represented a 2.3% response rate. Although this response rate is low, we were satisfied with the results because: 1) the total number of valid responses was high (i.e., 1188); 2) lurkers tend not to respond to surveys; 3) the survey was long; 4) the respondents were not paid; and 5) they did not know the researchers. The only incentive for completing the survey was an offer to report the results and the satisfaction that they were helping us with our research.

Table 2. Reasons given by lurkers to explain why they do not post

Why lurkers do not post	Lurkers Responding (%)
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
Others respond the way I would	18.7
Other	18.7
Want to remain anonymous	15.1
Had no intention to post from the outset	13.2
Of no value to me	11
Not enough time to post	9.1
Do not know how to post to this group	7.8
Poor quality of messages or 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

3. Results

Investigating the differences in attitudes and feelings between lurkers and posters involves: 1) probing why and for what purpose people go online and 2) their perceptions about posting and lurking. The questions that explored these issues in this survey are summarized in Table 1 and discussed in detail in the following subsections. These results indicate some interesting differences between people who do not post and those who do. Chi-square analyses are performed to show the significance of these comparisons and other statistical techniques are used when appropriate.

3.1 Primary reason for joining the online community

Lurkers and posters joined the online communities for similar reasons, with personal reasons topping the list (92.6%) while work and school were a distant second and third (5.9% and 1.5% respectively: see #1 in Table 1 and Figure 1). The respondents clearly used these communities in a discretionary manner.

3.2 Main attractions to the online community

The reasons why people join an online community are similar for lurkers and posters and statistically there was no significant difference across the groups (p>0.05). Both lurkers and posters ranked getting a "general understanding" highly (~66%). However, posters responded more frequently to all attraction categories, which suggests that posters are more engaged and may have higher expectations of the community from the start. In addition, posters were more frequently attracted to what can be called extroverted activities, e.g., to entertain others, build professional relationships, tell stories, and offer expertise. This suggests that introverted (i.e., self-directed) activities such as information seeking may be an important means of supporting lurkers. This support could come in the form of easily searched and browseable archives and other online informative resources such as FAQs.

Curiously, while lurkers did not publicly ask questions, they wanted answers to questions (62.1% lurkers vs. 70.3% for posters). How this is possible is not clear, but suggests that lurkers have high information expectations from their online communities. It also suggests that
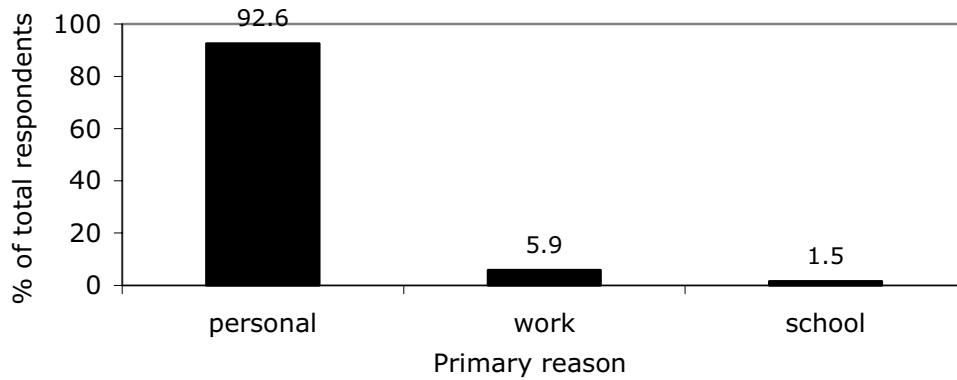
Figure 1: Primary reason for joining the community

community spaces must be designed to support their information needs without requiring public participation (i.e., keyword searches across postings). In our earlier study [6], 79 reasons for lurking were gathered from 10 participants and clustered into 26 categories, which provided a foundation for some of this study's survey questions. Table 2 summarizes the lurkers' responses. 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 can get their needs met through observation rather than public participation. This suggests that the tools for reading, finding, and browsing community information are important factors in supporting 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. Further research is needed to establish whether this is the case.

As Table 2 indicates there is a big gap between the most cited reason for lurking and all other reasons. The next most prominent reason, "still learning about the group (29.7%,) suggests that lurking may be a temporary period of non-posting that occurs on joining a group, and that once this period is over, then lurkers may turn to posters. The third most cited reason, "shy about posting" (28.3%), suggests that self-confidence is important in presenting oneself in online communities. This could be related to general shyness. Research is needed to find out whether lurkers are more reticent in face-to-face situations than posters. Of the lurkers who responded, only 13.2% intended to lurk from the outset. This suggests that lurking is either a post-joining adaptive strategy through which needs are met, e.g., through reading/browsing, or

members become lurkers; perhaps as a result of experiencing or witnessing aggressive or mocking behavior in the community. An anecdotal report [10] suggests that members of the Web site community Slashdot lurk because they fear aggressive comments or being made to look stupid.

Some other reasons that lurkers gave for not posting included the suggestion that the quality of the community leaves something to be desired or is unpleasant. If this is the case then lurking may lead to the lurker leaving the group, rather than becoming integrated as a more active participant. Seven point eight percent (7.8%) of lurkers also admitted they did not post because they did not know how. This is a clear indication that either educational interventions or improvements in the user interface are potential ways of increasing public participation. Mentoring for new members may also be helpful as occurs in some gaming communities

3.3 Is lurking affected when the community has an offline presence?

Having an offline presence has no significant effect on lurking levels. Twenty and one percent (20.1%) of respondents indicated they had had offline relationships. This is a surprising result since it is assumed that if one meets offline, one will be more likely to actively participate on-line.

3.4 Expectation met by community

Posters expectations were better met than lurkers, with 70.9% of the posters agreeing or strongly agreeing that their expectations were
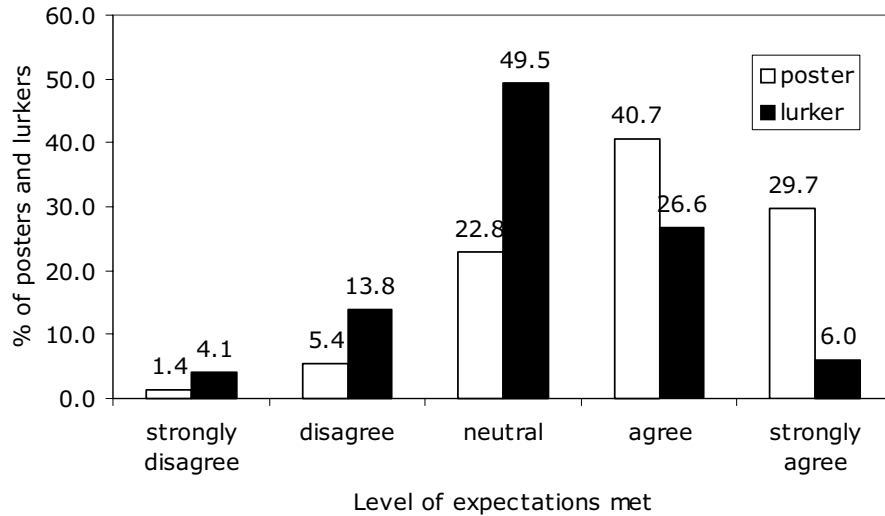
Figure 2. Degree to which expectations were met by the community.

met, while only 32.6% of the lurkers felt this way as shown in Figure 2. Lurkers on the other hand were much more neutral, with 49.5% indicating a neutral response (vs. 22.8% for posters). These results add some weight to the notion that lurkers have a less satisfying experience than posters. However, whether their lurking behavior is a cause or effect of their experience is not known.

3.5 Benefits of membership

When asked if they benefited from their community membership, lurkers were less enthusiastic about the benefits, with 41.8% indicating they received less than the expected benefit and only 8.0% said they received more benefit than they expected (see Figure 3). In contrast, only 16.3% of posters said they received less benefit than they expected and 36.6% of posters perceived a greater than expected benefit. In other words over four times the number of posters said they benefited and under half as many said they received less benefit than expected. Approximately 50% of both groups indicated the level of benefits was as they expected.
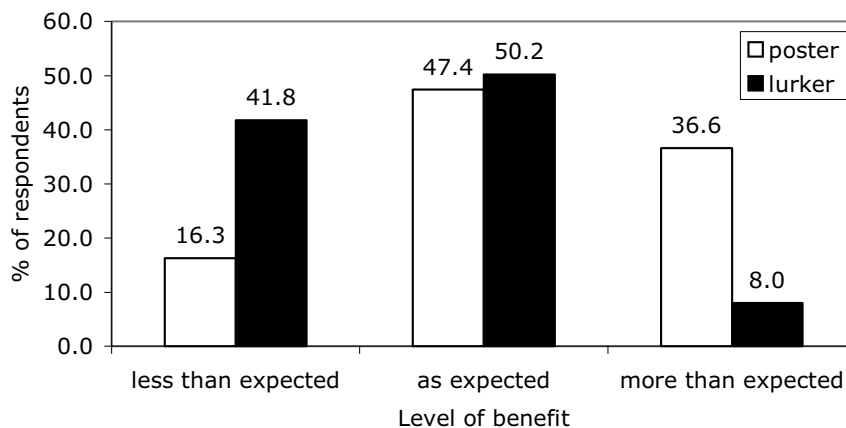

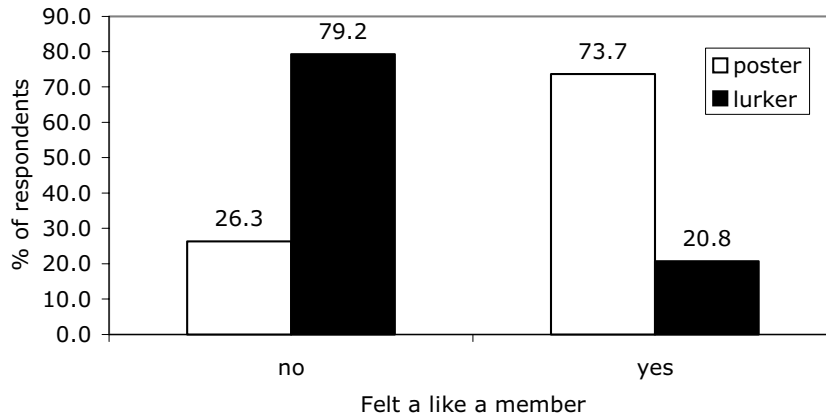
Figure 3. Benefits from being a member.

Figure 4. Feelings of community membership.

3.6 Feeling of community membership

In a previous study [6], several participants indicated they felt a sense of community while lurking. This was surprising and was worth investigating further. The results of this questionnaire study revealed that only 20.8% of lurkers felt a sense of community compared with 73.7% of posters (see Figure 4). In contrast almost 79.2 % of lurkers said they do not feel like they are community members compared with only 26.3 % of posters. So, while the overall results corroborate findings from our previous study, in that some lurkers can feel like community members, significantly more posters have feelings of membership.

3.7 Perception of posters

In the earlier study [3], it was shown that for many communities, relatively few posters do most of the posting. It was clear from previous interviews [3] that for some lurkers, this dominance by a few was off putting. This is confirmed by the current survey, where lurkers indicated significantly lower levels of respect for posters (39.0%) than do the posters themselves (72.6%) as shown in Figure 5. However, strong feelings of resentment or hostility towards posters were low (3.3% and 2.0% respectively) for both lurkers and posters.
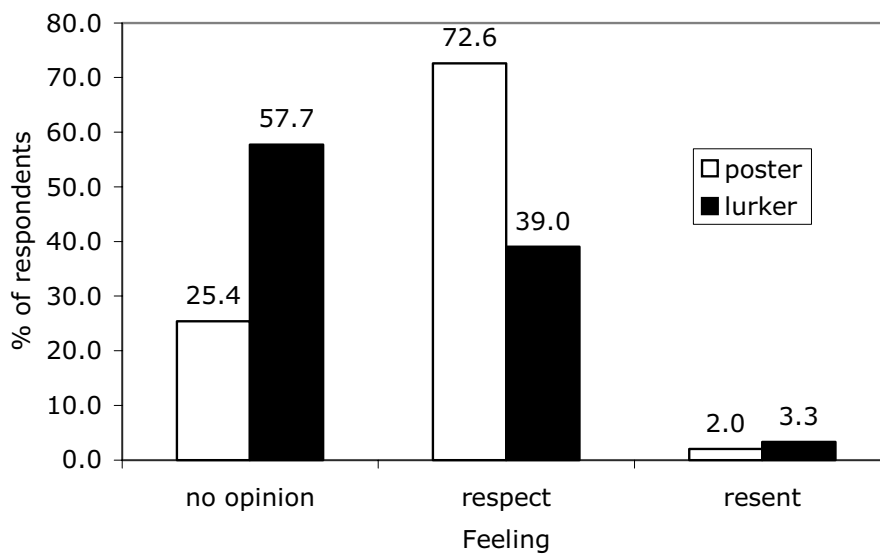

Figure 5: Feeling toward posters.

3.8 Perception of lurkers

When asked about their attitudes towards lurkers, survey respondents expressed little resentment towards lurkers with 1.8% of posters and 0.9% of lurkers resenting them (Figure 6). However, a higher number of posters and lurkers (8.5% and 8.0%) indicated that lurkers were not members of the community. This suggests a tolerance for lurking by most members, but for some respondents, lurkers are not considered to be members of the community. However, a much larger portion of the respondents considered lurkers to be community members (32.2% by posters, 19.7% by lurkers).

Surprisingly, lurkers are less likely to consider themselves and other lurkers as members than are their posting brethren. Perhaps they know something about lurking that posters do not understand. For some, it may be a case of lurkers feeling guilty about their lurking. There is anecdotal evidence of this in previous studies [12]. Interestingly, the vast majority of both posters (57.4%) and lurkers (71.4%) had no opinion on lurkers. Whether this is a case of never having thought about lurkers before or some other reason is not clear. Also, a recent study [8] of members of education support communities and health support communities about what makes online communities successful provides a positive view of lurking. In that study, 64% of education and 71.5% of health community members surveyed thought that it was important to allow lurking. Less than 10%

of members in each community held negative opinions about lurkers.

4. Conclusions

Overwhelmingly, lurkers and posters visit online communities for personal rather than work or school related reasons. Posters and lurkers alike were attracted to the online community first of all for understanding and information (general understanding, get answers and questions, read conversations and stories, and access to expertise). However, the posters' attraction to the online community focused on more extroverted aspects of interaction and enjoyment (offer my expertise, enjoy myself, entertain others, build professional relationships, tell stories and participate in conversations, make friends, get empathetic support and be a community member). Lurkers were more introverted.

In examining why lurkers do not post, the most frequently given answer was "just reading/browsing is enough". Clearly, many lurkers (53.9%) were able to satisfy their needs without having to publicly post. This is all the more surprising as only 13.2% of the lurkers intended to lurk from the outset.

Posters felt the online group met or exceeded their expectations, while lurkers were much more neutral or negative concerning expectations. Lurkers also perceived receiving significantly fewer benefits than posters. Posters also felt like a member of the community significantly more
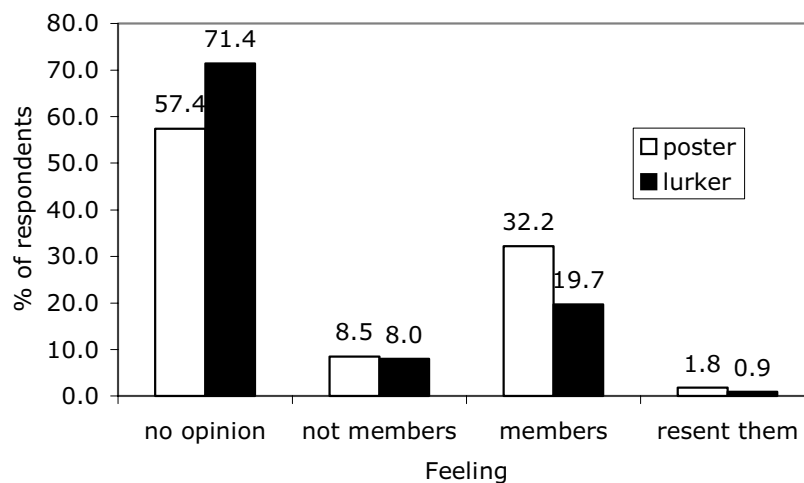

Figure 6: Feelings toward lurkers.

often than lurkers. However, 20.8% of the lurkers indicated they felt like community members, which supports results from previous interview studies in which lurkers said that they felt they belonged to the community [6, 7].

Finally, this study reveals two entirely different perspectives about the way lurkers and posters view each other. It appears that lurkers resent those who post too much while posters respect those who post and are more tolerant of lurkers than lurkers are of themselves. Contrary to the opinion that posters view lurkers as those who take but don't contribute, in other words, are 'free-riders' [13], there was little resentment towards lurkers by posters.

4.1 Suggestions for managing lurking

In response to what attracted them to a community, both lurkers and posters ranked getting a general understanding of the community highly (~66%). In general, posters were more frequently attracted to "extroverted activities", e.g., to entertain others, build professional relationships and offer expertise. This suggests that mechanisms for supporting introverted or self-directed activities such as seeking information and overviews of discussions may be crucial for supporting lurkers.

Communities seeking to encourage lurkers to become active public participants could try offering mentoring partnerships in which lurkers are gradually introduced into the community through small group activities and thus get to know about the community and its norms. Some lurkers may also be encouraged to participate if there was stronger moderation to prevent aggressive and mocking comments [10]. While lurkers did not publicly ask questions, they wanted answers to questions (62.1% vs. 70.3% for posters). How this is possible is unclear, but suggests that lurkers have high expectations from their online communities concerning information availability, so community spaces need to be designed to support their information needs without forcing lurkers to publicly participate.

Both this study and our previous study [6] suggest that privacy is an issue for some lurkers, particularly those who have a high profile in their society and who may not want to disclose information about themselves. Better guarantees of privacy may therefore encourage some lurkers to become visible through posting.

4.2 Implications for future work

This study provides answers to many questions about lurkers, their behavior and their attitudes. It also suggests several areas for future work. One important issue is whether lurkers would like to be posters and if so what they need to help them. For example, would more stringent moderation to stop aggression encourage lurkers in some communities to post? Would a mentor, or program for newcomers encourage lurkers to post because they feel more confident about both social interactions in the community and dealing with the technical aspects of an online environment.

There is considerable debate about whether lurking should be allowed in some communities. For example, those who view lurking as 'free-riding' wish to stop it. They argue that lurkers are draining the community's social capital [14], which is unfair to others. However, it seems clear that it is unwise to generalize. At certain stages in the life of a community, too much lurking may be detrimental. For example, if a new community has not reached the critical mass – the magic but somewhat elusive number of participants – needed for it to function, then encouraging posting and discouraging lurking is a good plan. In contrast, if the community is very large and active then lurking may actually be advantageous to the community; particularly if it helps to avoid the same questions being asked over and over again, or in diverting discussion off-topic. Knowing the demographic conditions detrimental to lurking or advantageous for a particular community is a topic for future research.

We also know that the amount of lurking varies in different types of communities. In medical communities about 46% of the population lurked, that is, they did not post over a three month period [7,8]. In contrast, lurking was around 86% in technical support communities [4-6]. However, we know nothing about lurking in gaming, government, recreational and other types of communities.

Another area of research that is gaining some momentum involves visualizing behavior in online communities, including lurking. Visualization tools could eliminate or, if executed inappropriately, encourage pejorative attitudes towards lurking. This would be a sorry loss for patients in medical support communities, who undoubtedly derive huge benefits from lurking. Furthermore, lurking is widely accepted within many of these communities [7]. However,

there are communities, such as IBM's instant messaging Babble system, in which the community agrees to make all participation visible to everyone [15], with no apparent bad effects on the community. Further research is needed to determine the most usable types of visualizations and when and how they should be used and by whom.

If we accept that lurking may be a personality trait like shyness that can be advantageous to very busy communities, and is tolerated by many communities, then better tools are needed to support effective lurking. Such tools would undoubtedly be valuable to posters too, many, if not most of whom, start their existence in a new community as a lurkers until they have learned the community rules and norms. This study has extended our knowledge of lurkers and their habits considerably, but there is still much too learn. Knowing how lurking affects communities at different stages of development and how lurking can be managed appropriately are particularly important research topics for the future.

5. Acknowledgements

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