

SPUR-OF-THE-MOMENT BLOGGING - A QUALITATIVE STUDY OF INSPIRATION AMONG THE USERS OF MICRO-BLOGS.

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Abstract

This report presents research performed on postgraduate students investigating their microblogging habits. Research was conducted using a combination of a short questionnaire, used for every post submitted to the microblog, and interviews to try and determine what users of microblogs, and especially Twitter users, are inspired by and how much effort they put into their posts. The research differs from much previous work in that it uses interviews and input from actual users of microblogs rather than relying on statistical analysis and data mining of the social networks of which they are a part.

The research indicates that posts are created very quickly, most often in less than a minute, and users are most often in a good mood when they submit their posts. The idea of creating a post about a certain topic seems to be triggered by an emotion or a strong feeling associated with an event or a thought. Also the users does not seem to have any particular audience in mind for their posts and they generally do not expect anyone to respond to them.

More research is encouraged using similar methods as presented in this report on larger sets of users and over a longer period of time to get a broader understanding of the types of users and habits that are present in these new social networks.

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Introduction

Micro-blogging is a service available through many online social networks. Services such as Twitter¹, Jaiku², Pounce³ and Facebook⁴ allow users to post small entries, often no more than 140 characters in length (as in the case of Twitter), of text, photos or URL:s that are instantly visible to the community. It is a relatively new area within social networking and has not received much research focus as of yet (Zhao & Rosson, 2009). These microblogging services allow users to build their own online networks by being followers of other users, i.e. subscribing to their posts, and by in turn being followed themselves. The widespread adoption of these services have been enabled by the increased mobility of the web. Users can connect through the web browser in their cellphones and can even use SMS-texting to post updates to their profile.

I myself have witnessed first hand the mainstream adoption of the Twitter service among friends and relatives over the past year and I have been using the service increasingly over the past 6 months.

The purpose of this research is to look at the habits of the microbloggers. Especially the focus is on the moment of inspiration and on what the purpose of individual posts are as perceived by the user. Of further interest is the effort that the user puts into the post as well as their expectations of receiving a response. The focus of this research is on the Twitter service, although data have also been gathered from the Facebook Status message service which has many similarities to Twitter.

The topic is relevant since research on social networks is still in its infancy. Research thus far have used the API:s provided by Twitter to gather large data sets on the users of the networks (Java, Song, Finin, & Tseng, 2007; Krishnamurthy, Gill, & Arlitt, 2008) but this research is restricted to making assumptions on the usage patterns and even the intentions of the users based on the numbers in the database. This research in statistical analysis of posts and users have yielded some early conclusions on what types of user intentions there are in the network, such as "daily chatter", "conversations", "sharing of information" and "reporting news" and also what categories of users there are, such as "information sources", "friends", and "information seekers" (Java, et al., 2007).

It is my intention to carry this research more in line with the research done by Zhao and Rosson on how micro-blogging supports informal communication at work (Zhao & Rosson, 2009). Their research is based on interviews with the actual users performed over a long period of time. While their research views the perceived benefits of micro blogging from a work perspective, my research is more aimed at the perceived benefits on a personal level.

The evolution of online social networks as part of Web 2.0 is an interesting area within information technology research since the technologies are shaped by the human desire to

¹ <http://www.twitter.com>

² <http://www.jaiku.com>

³ <http://www.pounce.com>

⁴ <http://www.facebook.com>

socialize. The Twitter phenomena is particularly interesting since the company running the network has not yet found a business model which enables them to profit from running the service (Snyder, 2009). Perhaps by understanding the underlying motivational patterns of people for using these services, the opportunity will arise to develop a profitable business model around it. Secondly, research might shine new light on a service which was quickly dubbed "The Seinfeld of the Internet", i.e a website about nothing (McFedries, 2007). It is my belief that it must mean something to the millions of users using it everyday.

Background and Twitter Service Overview

Twitter began as a research project within the San Francisco-based company Odeo in March of 2006. The service quickly became popular and is now running out of its own company (Sangani, 2009). Twitter have recently gained much publicity from the reports of protests and oppression following the elections in Iran (Grossman, 2009). Further U.S President Barack Obama used Twitter heavily during his presidential campaign which boosted user numbers of the service. President Obama quickly became one of the most popular users of the service and has at the time of writing about 2,200,000 followers ("Barack Obama on Twitter," 2009).

Anyone can sign up for Twitter and there are no costs associated with the service. To sign up, the user simply enters an email address and a username and a password. The user then has a number of choices to customize their profile such as entering their location and selecting a profile picture and the overall appearance of their profile.

An entry submitted by the user is known as a post or a "tweet" (McFedries, 2007) and is in the case of Twitter, limited to 140 characters in length. At the heart of the service is the feed (see Fig. 1) which display the most recent posts of the people that the user is following, as well as the users own posts. The feed is essentially the homepage of the user and it resembles the layout of a traditional blog. Posts are organized in a chronological manner with the most recent post at the top of the list. At the top of the page is the post entry form where the user can enter a new post. The user is encouraged to write what is currently on their mind by a header saying: "What are you doing?". Once the post is submitted, it will appear in the feeds of all the people that are following the user. The user can choose to make their feed open to the public or readable by invitation only. Publicly available posts can be read on a public timeline which aggregates all content published to the service.

Posts can further be browsed by the use of tags or topics. Posts can be tagged when submitted by adding a hash sign (#) as a prefix to a word in the post. Popular tags at any time can be seen in an area on the right hand side of the screen. The user also has access to a listing of all the people that are following him/her as well as all the people he/she is following. The user can send direct messages to any other user by writing that persons username, prefixed by an at sign (@) within the post along with the actual message. In this way, users can respond and comment on other users posts and thus the service inherits some traits of a discussion board or instant messaging service.



Fig 1. The "feed" as viewed by the user.

Through a publicly available API, developers are able to implement applications that can retrieve or post content from and to the feed. These APIs have made it possible to implement Twitter clients as desktop as well as mobile applications for a vast variety of platforms. The APIs as well as RSS functionality also allow users to incorporate their feed on other websites and social networks.

Research Question

The main question I am trying to answer in this research is: "What inspires or motivates a person to post about an event or a thought in that person's life?". Does the process follow a certain pattern? Is there a conscious reasoning going on inside the mind of the subject or is the need to post triggered by some unconscious impulse? My own experience is pointing towards the latter.

I was further inspired by a blog post I read recently on a blog called "The laughing Buddha". The post suggested that the popularity of microblogs might be connected to research which indicates that when humans are in situations that makes us think fast, feelings of elation and creativity are triggered (Dhami, 2009). The research was motivated by observations of the causal link between thought speed and mood as observed in clinical cases of mania (Pronin & Wegner, 2006). The blog post noted that sometimes when the author submitted several posts in a short burst of activity he was left with a "palpable dopamine surge". While this connection

might not tell the whole story, it may help explain how some people get addicted to twittering - the so called "Twitterholics" (McFedries, 2007). By examining the mood of research subjects and their microblogging habits, my research may help determine whether there is any validity behind this idea. I must point out however that I stumbled across this idea *after* the methods had been designed and the majority of data had been collected.

Research Design

My first intention was to use a series of interviews to gather data for what later could become a larger survey. This method would rely heavily on the subjects ability to accurately recall their state of mind at the time of submitting their posts. The findings from this method would risk being affected by the change of perception due to the effect of time having past since submission. The ideal situation would have been to follow the subject during a day and to do a short interview every time they posted something. This method would however be very time consuming and the continuous presence of a researcher would likely affect the subject in a way that he would either not post anything at all or that he would feel the pressure to post something random just to please the researcher. The design I settled for tried to benefit from some of the advantages of both these approaches.

The research uses a combination of methods for gathering data. The first method comprises of an online questionnaire that the subjects have been asked to fill out after posting an update. This would replace the continuously present researcher and the interview following a submission. The second method consisted of an interview with one of the subjects that have been using the questionnaire regularly. This combination of methods was chosen so that the subject could give a brief snapshot of their state of mind at the very time of the posting and then during the interview be allowed to elaborate around that particular post with the answers from the questionnaire as a guideline. If the subject had been asked to fill out a much more comprehensive or time consuming questionnaire at the time of the posting, it is my belief that it might have caused the subject to refrain from posting anything at all. The questionnaire was also likely to pick up the conscious motives and purposes behind the posts while the interview would give the opportunity to dig deeper and hopefully uncover some of the unconscious motives behind the posts.

Research subjects were selected based on voluntary participation. All subjects were taking part in the Research Methods I paper given at Auckland University of Technology during the spring of 2009. Potential subjects were asked to put their name and email address on a list so that they could be contacted at a later time.

Part A: Questionnaire

Subjects were invited via email to familiarize themselves with a questionnaire (see Appendix A) that was to be completed whenever the subject submitted a new post to the service. The questionnaire was made available online using the Google Docs questionnaire functionality⁵.

⁵ <http://www.google.com/docs>

While the questionnaire was publicly available, the data was collected into an online spreadsheet only visible to the researcher.

The purpose of the questionnaire was to capture the state of mind of the subject at the moment when the subject submitted his/her post.

The questionnaire was designed to be as unobtrusive and straight forward as possible and it was thus limited to only ten questions that should take no more than a couple of minutes to complete. The questionnaire consisted of one field where the subject was asked to paste the content of their latest post. This was followed by a set of questions enquiring about the state of mind of the subject at the time of the posting. The subject was for example asked what mood they were in and they could choose between "good mood," "bad mood" or "neutral". These were the things that the questionnaire asked the subject for (for the exact phrasings, see Appendix A):

1. A nickname - to be able to link multiple questionnaire entries from the same subject
2. The content of post
3. The service/services that the post was submitted to
4. The amount of time passed since the post was submitted
5. The amount of time spent creating the post
6. The mood of the subject at the time when the post was submitted
7. The perceived purpose of the post
8. The intended audience of the post
9. If the subject expected a response to the post
10. Any comments to the answers given to the above questions

Answers were to be given in free form text for questions 1, 2 and 10. The other questions were of multiple choice type.

Part B: Interview

The purpose of the semi-structured interview was to get a broader understanding of the usage pattern of a particular subject and to gain an understanding of how the subject viewed his/her usage of the service. The layout of the interview was loosely inspired by the work of Zhao & Rosson (Zhao & Rosson, 2009).

The subject was asked about their previous experience of using blogs and social networking. Further, the subject was asked about their general use of the service, for example if their posts follow a particular theme or if they use the service strictly on a personal or also on a professional level.

Following these general questions, the subject was presented with some of the posts that they had contributed with to the survey and these were discussed using a set of questions as a guideline.

The subject for the interview was selected based on their participation in the questionnaire. The user had contributed with entries for several of their posts into the questionnaire and there was thus a good amount of background material to use for an interview.

Findings and Discussion

Findings from Questionnaire

Out of the 8 volunteers, 3 subjects used the questionnaire during the time of data collection. In total 19 posts were submitted into the questionnaire. While this is only a small set of data, there is still some valuable conclusions that can be drawn.

Regarding the validity of the responses, answers to the control question - "When did you create this post?", indicates that while the majority of the postings were submitted only minutes before filling out the questionnaire, some responses were submitted in retrospect (see Fig. 2). The subjects perception of his or her state of mind is thus likely to have changed as time have passed.

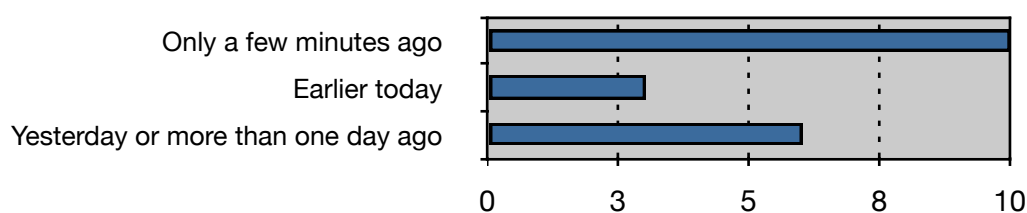


Fig 2. When did you create the post?

Finding 1. Subjects tended to post primarily when they were in a good mood

Responses to question 6 indicate that subjects were generally in a good or neutral mood when they submitted their posts (see Fig.3). This indicates either that the subject was already in a good mood and this is what triggered the post or that the posting itself caused the subjects mood to change. Looking at the actual content of the posts it is hard to determine which is more true. Some of the posts in themselves express, using happy smiley faces or exclamation marks, that the subject is indeed happy or excited, such as:

"Going 2 Waiheke Island 2day :D"

Other posts are more inconclusive - the sad smiley face indicating a bad mood:

"no judo today :(my ride turned in sick. Im off to gym instead. i like to movit, movit. You like to ..."

Both these examples were submitted when the subject was, according to the questionnaire, in a "good mood".

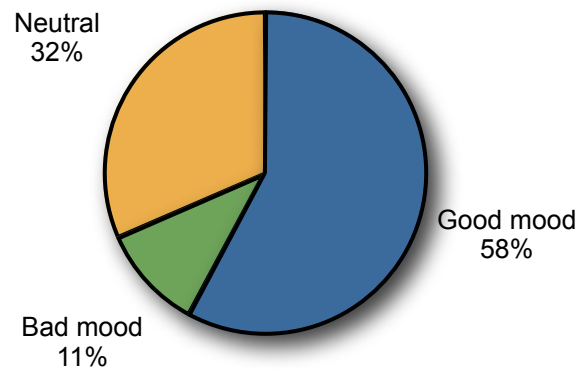


Figure 3. What mood are you currently in?

Finding 2. Subjects generally spent less than one minute on each posts

The specific question asked for the amount of time that the subject spent creating a post, counting from the time when the subject first thought about the post up until they had submitted it. The results show that the great majority of all posts appear as a thought and are submitted within one minute, with 40% of the posts being transformed from an idea to a submitted post in less than 10 seconds. This confirms the hypothesis that subjects generally do not put much effort into their posts.

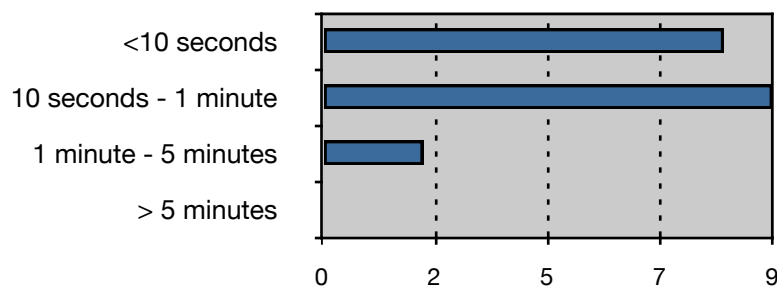


Fig 4. How much time did you spend creating this post?

Finding 3. Subjects mainly posted about what was on their mind and to express an emotion

Most posts in the data set can be classified as "daily chatter" which confirms research that indicate that most posts on Twitter are about daily routine and about what people are currently occupied with (Java, et al., 2007). A few examples follow below:

"Have got the munchies... Starbucks - here I come!"

"Lunch in Waitomo after going through the Glowworm Caves. Approaching the end of a really nice weekend :)"

"It's time for a haircut again!"

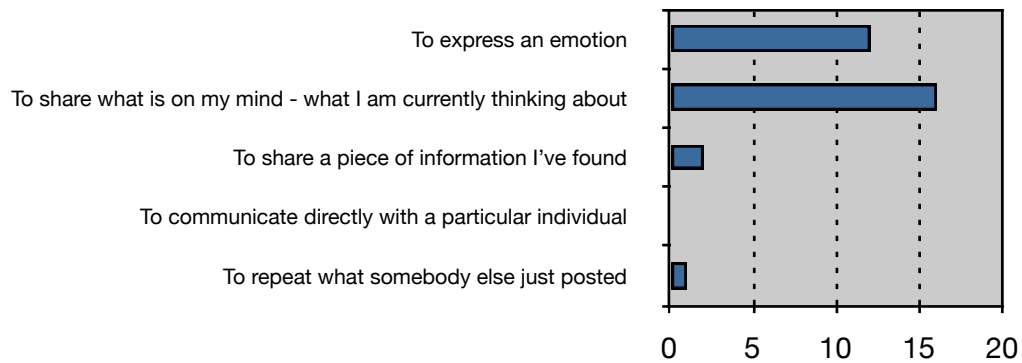


Fig 5. What would you say is your purpose with this post?

Finding 4. Subjects did not generally have an intended audience for the posts

This finding in combination with finding number 3 indicate that subjects were mostly talking to themselves or thinking aloud. Even when posts were phrased as questions the subjects stated that they did not have an intended audience with the post, such as:

"Whats up with the ♥ symbol everyone is using on facebook right now?? did a new keyboard model ship with ♥-signs all over or is fb just turning into a love-fest all of a sudden?"

Most posts does follow the think-aloud pattern, not addressing anyone in particular, such as:

"Seems like Microsoft is at least heading in the right direction with Windows 7..."

"Is trusting that the bedbugs are now exterminated and are moving back to our proper apartment."

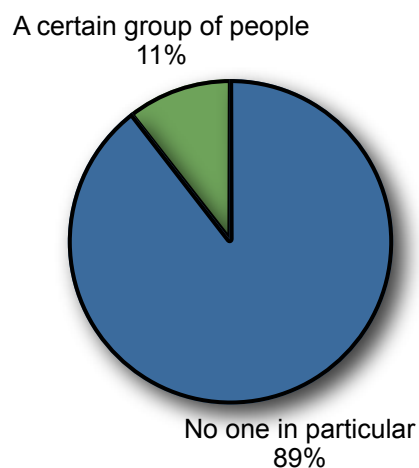


Fig 6. What is the intended audience of this post?

Finding 5. Subjects generally did not expect an answer to their posts

This finding is related to finding number 4 above. If the author had not intended any particular audience of the post, they likely had not either expected any response. This is also related to finding number 3 in that the purpose of the posts never in the data set was to communicate directly with another individual.

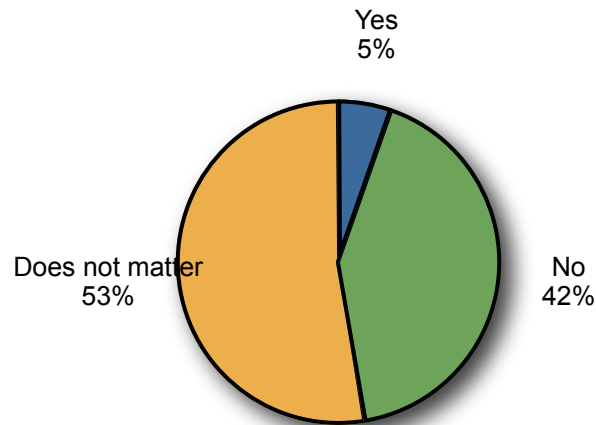


Fig 7. Do you expect someone to respond to this post?

Findings from Interview

The subject for the interview had been a registered Twitter user for the past 6 months but had only been an active user for the past 2,5 months. This change occurred due to the subject moving abroad and him starting to use Twitter to communicate with his friends and family who were following him from back home.

The subject was an experienced Internet user and he was in addition to running a personal blog and website also running a number of online discussion boards.

He connected to Twitter using a plugin developed for his personal blog which allowed him to post to his Twitter feed directly from his blog. His latest posts was also automatically displayed on the blog. He did not use the Twitter website to read the posts of the people he follows more than once a week.

He estimated that he submitted new posts semi-daily to several times a day.

Emotional attachment to a thought or an event

When asked about if his posts followed a certain theme he responded that his post could not be determined to follow a certain theme regarding the content. He added that he normally posted when he was in a good mood. He said that he rarely posted when he was in a bad mood - this is reflected in his questionnaire responses where only 2/10 posts were submitted when he was in a bad mood. When elaborating on the content of his posts and the mood he was in when he posted them, he concluded that he normally posted when he experienced an

emotional attachment or a strong feeling associated with a thought or an event. He did not go through a process of deciding what to post and what not to post, rather it was more of an impulse that emerged when something happened and he instantly knew he wanted to make a post about it.

Fun and novel way to communicate

When reflecting on his usage of the service, the subject thought it was a fun and new way to communicate. He found it much easier to let people know what he was up to through a Twitter post than to write a blog entry about it. He found it easy to start "conversations about nothing". When looking at Facebook he perceived that replying to status messages is the way people communicate these days. Since his Twitter posts are forwarded to his Facebook profile, he found that he got more responses to his posts than he originally thought.

Below are his three most recent posts submitted to the questionnaire followed by some of the subjects reasoning around those posts:

"Whats up with the ♥ symbol everyone is using on facebook right now?? did a new keyboard model ship with ♥-signs all over or is fb just turning into a love-fest all of a sudden?"

He got the idea for this post after being slightly annoyed by the sudden appearance of the heart sign all over Facebook. When asked to elaborate on the purpose of the post he said it was partly a question and partly a provocation. He also said that he did want an answer but he did not know from whom to expect one and he did not have any particular audience in mind for the post.

"Has 200 photos from Waitakere Ranges to go through tonight :)"

This post was submitted shortly after returning from a trip and he wanted the people who followed him to know that he had been away on an adventure. It was also an invitation for them to check back on his website as he was going to put the photos on his blog. He also added that he was in a happy mood when submitting the post.

*"AAAAHHHH F***ING HELL!! WHY DO YOU JACKHAMMER THE GOD DAMN ROAD 3AM!!! CAN SOMEONE SHOOT THEM??"*

This was one of the few posts submitted to the questionnaire when the subject was in a bad mood. He was up late and was getting angry at some road workers outside his window. He described his feelings as being angry and tired. Since he knew there were friends of him who probably also were disturbed by the noise, he submitted this post in hope to get some kind of response from them.

Conclusions

Findings from the questionnaire and the interview reveal that users find microblogging to be an effortless and fun way to communicate. Subjects were generally in a good mood whenever they posted something and most of the posts were created in less than a minute. The majority of the posts examined in this research falls into the "daily chatter" category as proposed by Java et. al.

The interview revealed some clues on how the "need" to create a post arises - it is normally accompanied with an emotional reaction or a strong feeling. So, to answer the research question we can say that users are inspired by daily events and thoughts and the idea to create a post most often appears as a form of an impulse and there is no real conscious reasoning behind what to post and what not to post.

It is too early to make any connection to research on manic thinking as presented in the research question but there are at least some findings that point in that direction, i.e the short time spent on the post which might trigger quick thinking. Also, the good mood reported by subjects might in fact be triggered by the process of creating the post itself. Further research to determine the cause and effect of these observations is needed.

Limitations

One of the main issues with the research presented in this report is the small data set that was gathered. Only three active users of the questionnaire and one subject for the interview makes it hard to make any generalizations about the Twitter community. Further, the data collection was performed over a very short period of time.

Comments from the interview also pointed out that some of the terminology in the questionnaire was perhaps too much related to Twitter. Since the questionnaire also gathered data from Facebook status messages it could have been phrased slightly different to appear more familiar to these users.

Perhaps a distinction between moods and feelings could have been introduced into the questionnaire to get a better understanding of the mindset of the subject.

The questionnaire itself could be enhanced to use the Twitter API:s to automatically remind users to fill in the questionnaire after a post had been submitted. This would give more accurate data on what time a post had been submitted as well as making sure *all* posts from a user was recorded.

Future Work

More research along the lines of the research presented in this paper is encouraged. It is my belief that a combination of methods as proposed herein is useful for capturing elements of a subjects mental state at the moment of inspiration and later allowing the subject to elaborate on the post given the answers given in the questionnaire. Comments from the interview regarding the method used indicates that the subject did not feel that the questionnaire was

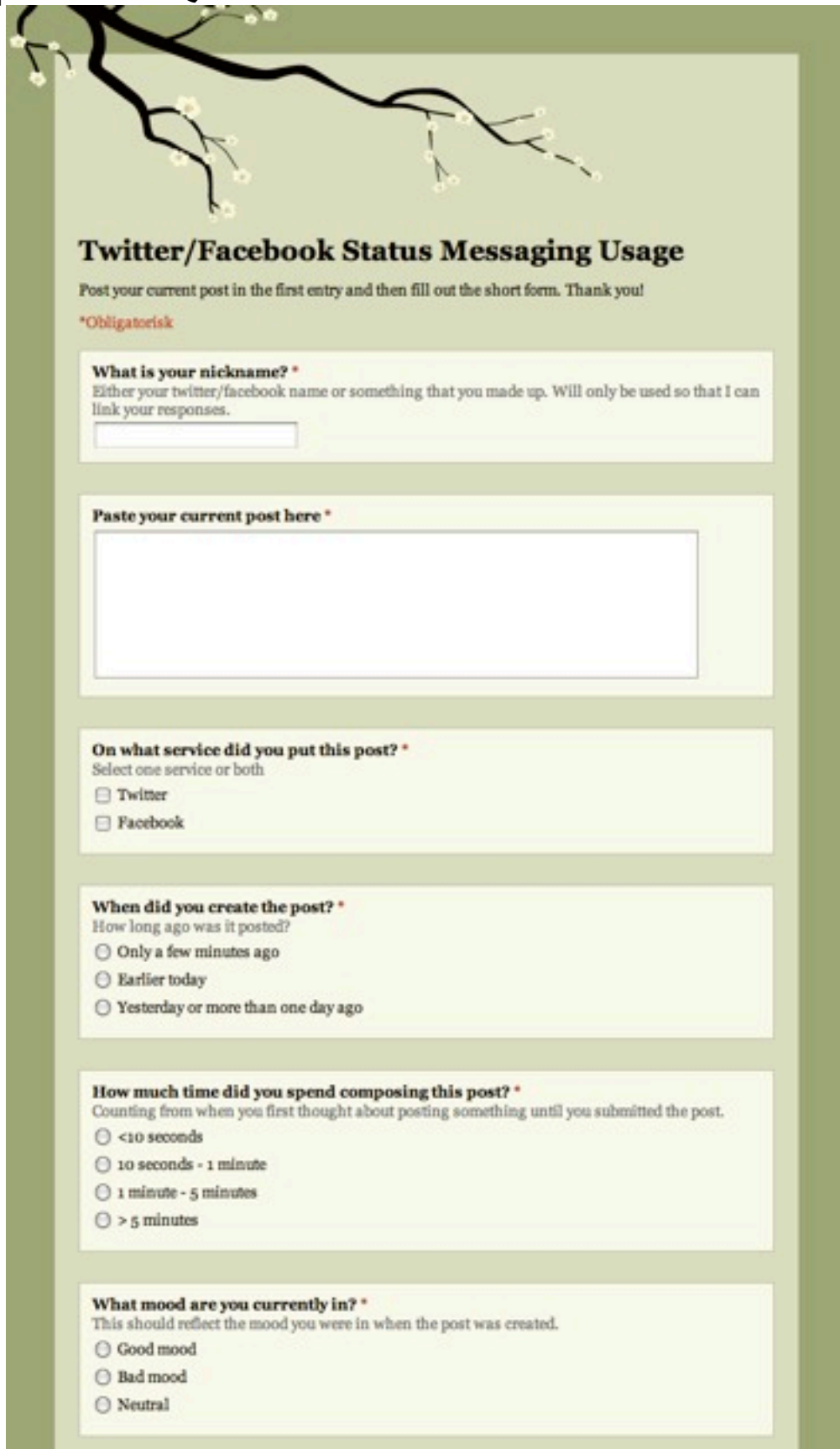
obstructing their microblogging habits. The interview subject also highlighted that since he had known the researcher for a while, he found it easy to discuss his posts during the interview. Allowing the subject to build a relation with the researcher has proven very valuable for the outcome of interview sessions in previous research (Zhao & Rosson, 2009). Longitudinal research that is designed to establish trust between the researcher and the subject is thus recommended.

The next step for the author would be to refine the questionnaire with the help of some of the findings in this report and to distribute it to a larger set of users. Having more fine grained multiple choice questions would open the door for more accurate statistical analysis of the data set. One could example correlate the perceived effort put into a post to the expectance of receiving a response. This would help to answer if users spend more time on creating the posts that they want to be read by someone else.

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Appendix A: The Questionnaire



Twitter/Facebook Status Messaging Usage

Post your current post in the first entry and then fill out the short form. Thank you!

***Obligatorisk**

What is your nickname? *
Either your twitter/facebook name or something that you made up. Will only be used so that I can link your responses.

Paste your current post here *

On what service did you put this post? *
Select one service or both

☐ Twitter

☐ Facebook

When did you create the post? *
How long ago was it posted?

☐ Only a few minutes ago

☐ Earlier today

☐ Yesterday or more than one day ago

How much time did you spend composing this post? *
Counting from when you first thought about posting something until you submitted the post.

☐ <10 seconds

☐ 10 seconds - 1 minute

☐ 1 minute - 5 minutes

☐ > 5 minutes

What mood are you currently in? *
This should reflect the mood you were in when the post was created.

☐ Good mood

☐ Bad mood

☐ Neutral

What would you say is your purpose with this post? *
Select the option that is the main purpose. Select several options if applicable.

☐ To express an emotion

☐ To share what is on my mind - what I am thinking about

☐ To share a piece of information I've found

☐ To communicate directly with a particular individual

☐ To repeat what somebody else just posted

☐ Övrigt:

What is the intended audience of this post? *
To whom is it directed?

☐ A particular individual

☐ A certain group of people

☐ No one in particular

Do you expect someone to respond to this post? *

☐ Yes

☐ No

☐ Does not matter

Do you have any comment on your answers above?

Från Google Dokument

[Rapportera missbruk](#) - [Användarvillkor](#) - [Ytterligare stöd](#)

Appendix B: Interview Manuscript

Background questions:

1. Tell me about your previous experience of social networking. What other services are you familiar with (Facebook/Pounce/Jaiku/Tumblr and so on)?
2. How long have you been using Twitter?
3. How often do you tweet?
4. How often do you read your Twitter feed?
5. When and in what condition do you normally tweet (time, place, mood)?
6. What do you know about your subscribers? Are they people you know or are they strangers?
7. How do you interact with your followers?
8. How do your followers find you, and why do you think they follow you?
9. How do you know if your audience read or pay attention to your tweets?
10. Would you say that your tweets follow a certain theme or are they very much random?
11. What do you get from micro-blogging? (Emotionally and functionally)
12. Are you, or have you been, using Twitter in any work-related context?
13. Would you say that your Twittering has evolved since you first started using the service? Have the themes or the frequency of posts changed? Any other changes?

Post-specific questions (to be answered once for each post addressed):

1. How did you make the choice of which services to put this post? Twitter versus Facebook and how did you reason around this?
2. Can you elaborate on the mood you were in when you submitted the post? Angry/sad/excited/tired and so on...?
3. Can you elaborate on the intended audience of the post? Does the audience follow your feed?
4. Do you think that your answer here captures the purpose of the post?
5. Anything else you want to add?

Method related:

1. How do you feel about the method used for this research?
2. How much time did you spend answering the questionnaire?
3. Did the knowing of the questionnaire ever prevent you from posting something?