

Falling Down the Wikihole: An Inquiry into Idle, Time-Intensive Wikipedia Browsing

ZACHARY FOOTE and AMBER DIERKING

THE UNIVERSITY OF BRITISH COLUMBIA SCHOOL OF LIBRARY, ARCHIVAL, AND
INFORMATION STUDIES

INSTRUCTOR: R. KOPAK

COURSE: LIBR 507

Table of Contents

- I. Statement of Purpose • 3
- II. Research Strategy • 4
- III. Ethics Statement • 6
- IV. Instructions for Gathering Data • 9
- V. Description of Sampling Strategy • 12
- VI. Conclusions • 13
- VII. Data-Gathering Instruments • 15
 - a. Blank Questionnaire • 15
 - b. Completed Questionnaire • 19
 - c. Focus Group Script • 23
 - d. Focus Group Sample Transcript • 24
- VIII. Codebook • 28
 - a. Questionnaire Data Coding Booklet • 28
 - b. Questionnaire Data Coding Sheet • 31
 - c. Focus Group Data Coding Booklet • 33
 - d. Focus Group Data Coding Sheet • 34

Appendix A. Pre-Questionnaire Information & Consent Form • 35

Appendix B. Focus Group Informational E-mail • 36

Appendix C. Focus Group Consent Form • 37

References • 40

I. Statement of Purpose

As Wikipedia has become many internet users' first stop for casual reference, the term "Wikipihole" has occasionally infiltrated the Internet's ever-expanding lexicon.

But what, exactly, is a Wikipihole?

Broadly speaking, the term describes a phenomenon where Wikipedia users begin at a point of interest and soon find themselves – often unexpectedly – spending long periods of time navigating toward tangential topics that draw them farther and farther away from their origin. When someone sets out to look up a single Wikipedia article (say, for the Frankfurt School of philosophers and cultural critics), but ends up spending an hour pleurably clicking through to increasingly unrelated articles (from the Frankfurt School on to the University of Vienna, to Duke Rudolf IV, to cenotaphs, to the Falklands War...), she can be said to have "fallen down a Wikipihole."

We find this behavior interesting, and we think further study could contribute to a better understanding of leisurely, undirected browsing habits. Prior work has demonstrated that what people find interesting is not always immediately relevant to them, and what is immediately relevant to them is often, but not always, interesting. These distinctions, as Tsurel *et al.*'s "Fun Facts" study notes, play a role in the novelty and appeal of trivia facts (2016). Studies also demonstrate that *serendipity*, or unanticipated fortuity, is part of the usefulness and appeal of information discovery. For instance, the McCay-Peet and Toms study "The Process of Serendipity in Knowledge Work" illustrates how historians rely on both "active learning," or asking initial questions that lead to new, unanticipated questions during the research process, and "social networks," or appeals to their colleagues' expertise, to help spur their own formulations of innovative historical concepts and frameworks (2010). Meanwhile,

André *et al.*, in “From X-Rays to Silly Putty via Uranus,” suggest that some of the Internet users they observed in their study may have clicked on many different search results “not just because they could not find what they wanted, but because they considered more things interesting or were more willing to go off at a tangent” (2009).

We think a relatively high incidence of serendipitous encounters occur during Wikipedia reading sessions, and that serendipity may be a major driver for time-intensive browsing behavior. With this in mind, we want to ask Wikipedia enthusiasts about the “Wikihole” phenomenon to see what responses we might elicit. We would like to find out more about what factors, both internal (feelings, motivations, impulses) and external (Wikipedia’s structure and style), might encourage them to “fall down the Wikihole.”

II. Research Strategy

We will carry out a mixed-method, but mainly qualitative, study. Our study gathers a small amount of quantitative information relative to demographics and Wikipedia usage information from our sample of Wikipedia users, and then analyzes their textual and verbal responses to open-ended questions.

To obtain the sample, we will look to an invite-only Facebook group that sports over 47,000 members (and counting): *Cool Freaks’ Wikipedia Club*. The conceit of *Cool Freaks’ Wikipedia Club* is simple – members post curiosities, minutia, or any other surprising information they have found on Wikipedia to the group’s Discussion page, being sure to include any relevant warnings for potentially sensitive or triggering content. Other members can comment on, share or otherwise engage with content posted to the group.

The questionnaire features both closed-ended and open-ended questions relevant to our purposes. Moderators of the group will be contacted if we can post a link to the questionnaire on the *Cool Freaks' Wikipedia Club* front page, and if the post can be pinned to the top of the page for the period of a month. If the moderators agree to assist us, then and only then will we post the link.

At the end of the questionnaire, the participant will be asked if they would be interested in participating in a follow-up focus group in exchange for an extra incentive. If they agree, the participant will be asked to supply their contact information. From the pool of participants who opt into the focus group, 12 candidates will at random to contact for the focus group session. Though we likely only need about six to eight focus group participants, we will contact 12 to make up for any participants who might drop out of the study without notice. Depending on the number of participants that confirm their willingness to participate, up to five focus group sessions may be scheduled until the information that the researchers receive becomes saturated. A common time and date will be negotiated that works best for most participants, and a focus group session will be hosted at that date and time through the AnyMeeting conference tool. The focus group should last no longer than 45 minutes.

Our focus is on qualitative analysis in part because the time-intensive Wikipedia browsing that characterizes a “Wikipihole” is usually a spontaneous behavior that is difficult to capture or replicate faithfully in a laboratory setting. The questions in the questionnaire are intended to stoke self-reflection on Wikipedia browsing behavior. We anticipate some outliers – some subjects who participate in the questionnaire may not have ever spontaneously browsed Wikipedia for prolonged periods of time. But we also

anticipate those that have may be more interested in doing the follow-up focus group that comes after the questionnaire.

We decided to facilitate a focus group in addition to the questionnaire because it will be beneficial to integrate two different approaches to our qualitative research. Focus groups are highly spontaneous and socially-oriented; panelists can agree or (respectfully) disagree with one another, build off each other's observations, and develop unexpected insights. If we ask subjects to reflect upon their online behavior on the spot, we may be able to elicit some interesting responses. After we have gathered the data from both the focus group and the questionnaire, we will compare and contrast the responses we get from each. The two different sets of data should reveal some common themes, but either dataset could also reveal a salient point not present in the other.

III. Ethics Statement

In this project, researchers will be investigating the personal Wikipedia browsing habits of individuals belonging to the Facebook group *Cool Freaks' Wikipedia Club*. Members of the group will be invited to participate in a questionnaire with the option of additional participation in a focus group. These methods aim to address the following questions: What do individual's browsing habits on Wikipedia look like? How are their browsing habits on Wikipedia different from their browsing habits on other sites? Does the structure of Wikipedia effect these habits? If so, are they aware of the structure? What do they do with the information they discover while browsing?

The participants will be members of the Facebook group *Cool Freaks' Wikipedia Club*. The group was selected for study because it has a large member base (approximately 47,000 people), and because members are assumed to be familiar with Wikipedia already, which will lead to a higher response rate. We are hopeful that

membership in this Facebook group also denotes a certain level of enthusiasm for Wikipedia itself, which will lead to more detailed, articulate responses. Since we were also interested in how participants shared the information they found while browsing Wikipedia, we excluded anyone who was not a member of the Facebook group *Cool Freaks' Wikipedia Club*, as we plan to ask several questions specific to the group setting.

Before inviting members of the group to participate in the questionnaire, we will contact the group moderator for permission to do so. Once the moderator has approved our proposal, the questionnaire will be posted to the discussion page on *Cool Freaks' Wikipedia Club*. Once participants have clicked on the link to the questionnaire they will be directed to an information/consent form they must agree to before continuing on to the questionnaire itself. This form will include the names and contact information of the researchers as well as what privacy measures will be taken to protect the data they provide. At the end of the questionnaire, participants will have the choice to opt in to participate in further study of this topic. We will use InfoPoll to host the questionnaire because we know InfoPoll's servers are located in Canada.

The next step in this project will be a focus group. A randomized sample will be chosen from the participants that indicated they were open to further participation. These participants will then be contacted via email explaining the details of the focus group. An electronic consent form will be sent to each randomly selected participant that details the terms of their participation, the honorarium, privacy measures, the researcher's contact information as well as re-emphasizing that participation in the focus group is voluntary. This form must be signed and sent back to the researchers. The focus group session(s) will take place using the open-source conferencing software, AnyMeeting, and will take no longer than 45 minutes.

The questions that will be asked in the focus group are intended to provide further depth and detail than the questionnaire was able to do. They will be asked in a semi-structured fashion; the facilitator will be provided with a script and instructed to address each question. Facilitators may, however, adjust order, phrasing or add follow-up questions at their own discretion in order to support a comfortable, conversational atmosphere.

Participants will be offered the option to review the transcripts of the focus group, and to receive copies of any publications that result from this research. There are no anticipated risks or harm associated with this study. However, participants will be notified that should they feel uncomfortable in any way they may stop speaking or exit the focus group with no repercussions. Confidentiality of each participant is guaranteed. All data collected will be stored on password protected computers, without their identifying information, and coded so that each participant is only identified by a number. Only the named researchers will have access to the actual name and contact information of participants.

Each participant in the focus group will receive either an honorarium of a \$20 gift card to one of either four common businesses or a donation of equal value to a charitable organization of their choice. The honorarium will be sent upon completion of the focus group. All participants, including any that may have exited early in the session, will receive the honorarium.

IV. Instructions for Gathering Data

First, format and host the questionnaire supplied in the **Questionnaire** section on InfoPoll. In particular, be sure to insert the page break after question **11b**.

Next, gain access to the Facebook group *Cool Freaks' Wikipedia Club* by requesting to join it. A moderator will approve you. Before posting the questionnaire to the *Cool Freaks' Wikipedia Club* Facebook page, first identify the moderators of the page and ask them for permission to post the questionnaire as follows:

Hello,

My name is [researcher's name], and my fellow information studies researchers and I are interested in Cool Freaks' Wikipedia Club as a potential venue for a study on leisurely, time-intensive Wikipedia use. This study will be completely voluntary, and we do not expect it to pose any potential harm to members of the group. As moderators, you may review the questionnaire in advance to determine whether or not you believe the study is appropriate for this venue. At the end of the questionnaire, members of the group may opt into an additional focus group session for the purposes of this study.

Should you accept our request, we also ask that the post containing the link to the questionnaire be pinned to the top of the page for the duration of a month to maximize its visibility. We appreciate your attention to this matter, and we hope we can work with the group on what should be an enlightening study!

Thank you,

[researcher's name]

If the group's moderators, by consensus, accept the request, post the link to the questionnaire to the Discussion page of the *Cool Freaks' Wikipedia Club* page. Check to

make sure that the moderators pin the post to the top of the Discussion page within a couple of days.

Once 30 days have passed from the time of posting, close the questionnaire to the public and tabulate the total response results. Count the “yes” responses to question **14a**, and place the name/e-mail/phone number combinations from question **14b** into an encrypted spreadsheet on a secure server.

Contact each respondent who supplied their contact information in **14b** by e-mail with the **Focus Group Informational Form E-mail** (which can be found in **Appendix B** of this research project design), and attach the **Focus Group Consent Form** found in **Appendix C** as a PDF file. Change any dates on the consent form as needed.

Wait seven days. Send one reminder e-mail at the halfway point – on the third or fourth day. At the end of the seventh day, see if least 12 people have replied to confirm their availability to participate in the focus group.¹ If there are not at least 12 confirmations, take two more days to try to contact by phone those respondents who have volunteered their phone numbers. *Phone calls are only to be used as a last resort to help the focus group meet its initial participant quota.*

Refer to the respondents’ consent forms. Choose the time and date that respondents most frequently marked as available, and send each respondent a follow-up e-mail that reads as follows:

Hello,

¹ More than one focus group session may be scheduled if more than 12 respondents assent to participation. Researchers are encouraged to host as many focus group sessions as they see fit in an effort to gather a diverse array of data.

After careful consideration, we have decided to hold the focus group session at [date and time]. This date and time was selected because it was convenient for the greatest number of respondents. If this date and time works for you, please place a reminder on your calendar at your earliest convenience. For this focus group session, please have either a built-in computer microphone or a headset available, as we will be recording audio from this session for use in our study's transcript.

If this date or time does not work for you, we sincerely apologize for any inconvenience we may have caused.

Thank you,

[researcher's name]

Some of the respondents may drop out at this point because the date and time *does not* work for them, but as long as the study retains five or more subjects, the study should be able to go forward as planned. Send the remaining participants an invite to an AnyMeeting virtual conference at the appointed date and time.

On the day of the focus group session, set up an AnyMeeting conference room well in advance of the agreed-upon time – at least a half-hour beforehand. The conferencing software is browser-based and thus should not require participants to download anything. At the appointed time, please give participants an extra five minutes to file into the conference room and get ready. Take roll and carefully follow the introductory script supplied in the **Focus Group** section. Start a timer for 45 minutes after this point. Ask the questions supplied in the order they appear on the script. You may ask follow-up questions that clarify or refine responses, but please try to stick as close to the script as possible. After the 45 minutes is up, conclude the session with the remarks supplied on the script.

V. Description of Sampling Strategy

The sampling frame for this research project includes members of the Facebook group, “Cool Freaks Wikipedia Club”. The group was purposefully selected for study because it has a large member base (of approximately 47,000 people), and because members are assumed to be familiar with Wikipedia already which will lead to a higher response rate. We are hopeful that membership in this Facebook group also denotes a certain level of enthusiasm for Wikipedia itself, which will lead to more detailed, articulate responses.

Since we were also interested in how participants shared the information they found while browsing Wikipedia, we excluded anyone who was not a member of the Facebook group *Cool Freaks Wikipedia Club*, as we plan to ask several questions specific to the group setting. We are aware that this sampling frame inherently includes only those who are Facebook users with internet access and therefore is not a representative subset of all Wikipedia users, so we will avoid applying any conclusions we draw to a more general population.

In order to ensure our participant sample for the focus group was valid and reliable, we used a randomized sample from the questionnaire respondents that answered “yes” to question **14a**. This randomization will help us to avoid any potential sampling bias.

We chose to conduct both the questionnaire and focus group digitally/virtually because of the flexibility, efficiency and versatility it provided. We included qualitative as well as quantitative methods because meaning and individual perceptions are an essential aspect of our investigation.

VI. Conclusions

When we analyze the data we've collected, we will be looking for respondents' personal recollections of the unanticipated, time-intensive Wikipedia browsing instances we call "Wikiholes," as well as participants' critical perspectives on how and why these instances might come about. We began by asking questions that did not refer explicitly to the Wikihole behavior, but provided some demographic background information and contextualized their Wikipedia use in general. From there, we zoom in more closely, asking questions specifically about characteristics typical of Wikihole behaviors – especially in the focus group setting.

Here, different stories about undirected information behavior and serendipitous results are of particular interest. Additionally, comments on different structural aspects of Wikipedia as a website, along with the stated effects of those structural decisions on respondents' browsing experiences will be noted. Finally, we will identify instances where our subjects indicate potential advantages or drawbacks to Wikihole-related behaviors. We will then make inferences and connections between all of these observations to create a more holistic synthesis of Wikihole behavior. Consideration must also be given to data that might appear to flout our initial hypotheses.

The subjectivity of open-ended responses creates interesting challenges. Input from respondents in both the questionnaire and the focus group may come cloaked in euphemistic phrasing. The points they make, whether in print or in speech, may not be artfully articulated or fully formed. We must do some interpretive legwork – and possibly look to past literature on specific information behaviors – to parse what our respondents might mean when they say what they say. Ultimately, we aim to make more generalizable meaning from our sample's anecdotal evidence. Our study is not

necessarily a comprehensive overview of the general population's Wikihole behaviors and circumstances, but an investigative starting point from which further studies could be performed.

VII. Data-Gathering Instruments

a. Blank Questionnaire

1. How old are you?

- 19-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50+

2. What is/are your gender identification(s)? (choose all that apply)

- man
- woman
- non-binary
- two-spirit
- agender
- other
- prefer not to say

3. What is your highest completed level of education?

- Some secondary education (high school)
- High school diploma
- Some post-secondary education (college or university)
- Associate degree
- Bachelor's degree
- Master's degree
- Ph.D.

4. How often do you use Wikipedia?

- multiple times per day
- about once a day
- about every two or three days
- about once a week
- about two or three times a month
- once a month or less

5. How much time do you estimate you spend on Wikipedia in an average session? (A "session," for our purposes, is a finite segment of browsing time, which is eventually terminated by either closing the Wikipedia browsing window(s) or leaving the browsing window(s) idle for a sustained period.)

- less than 5 minutes
- 5 to 15 minutes
- 16 to 30 minutes
- 31 minutes to 1 hour
- more than an hour

6. On average, how many Wikipedia pages do you browse per session?

- 1-2
- 3-4
- 5-6
- 7-8
- 9-10
- 11+

7. How do you use Wikipedia? Check all that apply.

- research
- fact-checking
- finding additional resources
- entertainment/leisure
- editing
- other – please explain: _____

8. What effects, if any, does your Wikipedia usage have on your productivity?

9a. Have you ever shared a Wikipedia article to the Discussion section of Cool Freaks Wikipedia Club?

- yes
- no

9b. If so, please give an example. How do you remember first encountering this article?

10a. Have you shared information you found on Wikipedia outside of Cool Freaks' Wikipedia Club?

- yes
- no

10b. If yes, please think of an example or two. With whom did you share the information you found and why?

11a. Have you heard the term “Wikhole” before?

- yes
- no

11b. If so, please explain what you think it means in your own words.

Please continue to the next page.

A Wikihole is commonly defined as an extended Wikipedia browsing session in which users begin at a certain article and, often because of an undirected, unanticipated curiosity, navigate toward more tangential topics that draw them farther away from the point of origin.

12a. Have you experienced this phenomenon before?

- yes
 no

12b. If so, can you think of a specific instance when you have experienced it?

13. If you use a term or phrase other than “Wikihole” to describe the phenomenon outlined in the definition above, please state it below.

14a. Would you be interested in participating in a follow-up focus group on this subject (to be held over the Internet)?

- yes
 no

14b. If you are interested, please supply us with some basic contact information. We will not use your name, e-mail address, or phone number for any other purpose other than contacting you.

Name: _____

E-mail: _____

Phone number (Optional): _____

b. Completed Questionnaire

1. How old are you?

- 19-24
 25-29
 30-34
 35-39
 40-44
 45-49
 50+

2. What is/are your gender identification(s)? (choose all that apply)

- man
 woman
 non-binary
 two-spirit
 agender
 other
 prefer not to say

3. What is your highest completed level of education?

- Some secondary education (high school)
 High school diploma
 Some post-secondary education (college or university)
 Associate degree
 Bachelor's degree
 Master's degree
 Ph.D.

4. How often do you use Wikipedia?

- multiple times per day
 about once a day
 about every two or three days
 about once a week
 about two or three times a month
 once a month or less

5. How much time do you estimate you spend on Wikipedia in an average session? (A "session," for our purposes, is a finite segment of browsing time, which is eventually terminated by either closing the Wikipedia browsing window(s) or leaving the browsing window(s) idle for a sustained period.)

- less than 5 minutes
 5 to 15 minutes
 16 to 30 minutes
 31 minutes to 1 hour
 more than an hour

6. On average, how many Wikipedia pages do you browse per session?

- 1-2
 3-4

- 5-6
- 7-8
- 9-10
- 11+

7. How do you use Wikipedia? Check all that apply.

- research
- fact-checking
- finding additional resources
- entertainment/leisure
- editing
- other – please explain: _____

8. What effects, if any, does your Wikipedia usage have on your productivity?

Wikipedia helps me get background information on a research topic quickly, and I can even mine the bottoms of Wiki pages for potential sources if I need to write a paper on something. On the other hand, I also tend to kill time on Wikipedia looking up other things that are unrelated to the work I am supposed to be doing. It might look like I'm doing something productive, and I can convince myself in the moment that I am actually being productive by looking up the various flags of Russia or whatever, but it really has no bearing. It can be a terrible procrastination enabler.

9a. Have you ever shared a Wikipedia article to the Discussion section of Cool Freaks Wikipedia Club?

- yes
- no

9b. If so, please give an example. How do you remember first encountering this article?

I haven't shared one in a long time, but I remember sharing the article for a bizarre old Atari game called Mangia. The premise of the game is that you're a boy whose mom keeps serving you endless plates of pasta, and you have to keep feeding the plates to your pets while your mom's back is turned so your stomach doesn't explode. If your mom catches you, you are punished with three plates of pasta. I think I stumbled on it by accident when I was searching Google for a local bar/restaurant called Mangia Italiano, and I just had to share it to the Cool Freaks group for obvious reasons. It was just such a bizarre premise.

10a. Have you shared information you found on Wikipedia outside of Cool Freaks Wikipedia Club?

- yes
- no

10b. If yes, please think of an example or two. With whom did you share the information you found and why?

I share things I find on Wiki with my friends over Facebook chat all the time. Most of the time, it's about things that we all might find interesting or funny. Usually deadpan quotes from the article or strange subjects or obscure finds. A lot like sharing with Cool Freaks, but with even more niche appeal, if that makes sense – like inside jokes.

11a. Have you heard the term “Wikiphole” before?

- yes
 no

11b. If so, please explain what you think it means in your own words.

I think it means to fall in this pattern where you are looking through Wikipedia aimlessly and randomly. You come to this point where you are clicking around with multiple tabs open and just engrossed in reading about a lot of different things in this very scattershot way.

Please continue to the next page.

A Wikihole is commonly defined as an extended Wikipedia browsing session in which users begin at a certain article and, often because of an undirected, unanticipated curiosity, navigate toward more tangential topics that draw them farther away from the point of origin.

12a. Have you experienced this phenomenon before?

- yes
 no

12b. If so, can you think of a specific instance when you have experienced it?

It occurs a lot, for instance, when I look up a film director. I will end up scrolling down to the bottom of the page and going through their filmography one by one, trying to get a sense of their creative trajectory. Then, naturally, I will start looking at the pages of different actors or actresses featured in these movies, and I will look at other movies THEY'VE been in. Sometimes the movie pages will also have details like filming locales or trivia surrounding the film that will prompt me to click still other links, and so on. I can lose a lot of time doing this.

13. If you use a term or phrase other than "Wikihole" to describe the phenomenon outlined in the definition above, please state it below.

n/a – this is the term I use

14a. Would you be interested in participating in a follow-up focus group on this subject (to be held over the Internet)?

- yes
 no

14b. If you are interested, please supply us with some basic contact information. We will not use your name, e-mail address, or phone number for any other purpose other than contacting you.

Name: _____ Chaz Otofe _____

E-mail: _____ chaz.otofe@gmail.com _____

Phone number (Optional): _____ (778) 555-0134 _____

c. Focus Group Script

Welcome, everybody. I would like to acknowledge, in the spirit of the ongoing First Nations truth and reconciliation process, that here at the University of British Columbia I am on the traditional, ancestral, and unceded territory of the Musqueam people.

We are here today to talk about Wikipedia and Wikiholes. I would like to reiterate that participation in this focus group is voluntary, and participants have the right to leave at any time during the course of our discussion. As stated on the consent forms, the focus group should only take about 45 minutes, and all the data gathered will remain anonymous. Your name or identifying information will not be attached to the results in any way.

Let's take turns and introduce ourselves. I am [your name and title]. If you would say hello to the group when I say your name, then we will get started. If you have a preferred or familiar name, feel free to inform me. Feel free to state your preferred pronouns with your name as well. [Introductions]

Okay, let's get started.

1. In the questionnaire, you were each asked about the phenomenon of Wikiholes. I'd like you to elaborate on your experiences with this phenomenon, perhaps with a particularly memorable story or result of this experience.
2. What are your feelings upon surfacing from time spent down a Wikihole?
3. Can you identify any patterns in your behavior when you find yourself falling down a Wikihole?
4. Have you ever thought critically about how Wikipedia is structured as a website, especially compared to other sites? If you have, what are your thoughts on the matter? If you haven't, please take a moment now to think about the similarities and differences?
5. Has your experience with/interaction on Cool Freaks Wikipedia Club affected your activity on Wikipedia?
6. Do you think that the ways in which we, as a society, use Wikipedia have changed over time? If so, how?

Thank you, everyone, for your participation. This is the end of the focus group. Please remember, if you have any questions about this research, you can contact us at [researcher's contact information].

d. Focus Group Sample Transcript

Facilitator: Welcome everybody. I would like to acknowledge, in the spirit of the ongoing First Nations truth and reconciliation process, that here at the University of British Columbia I am on the traditional, ancestral, and unceded territory of the Musqueam people.

We are here today to talk about Wikipedia and Wikiholes. I would like to reiterate that participation in this focus group is voluntary, and participants have the right to leave at any time during the course of our discussion. As stated on the consent forms, it should only take about 45 minutes and all the data gathered will remain anonymous - your name or identifying information will not be attached to the results in any way.

Let's take turns and introduce ourselves, I am Amber Dierking, one of the researchers on this project, if you would like to say "hello" to the group please say your name then we'll get started, if you have a preferred or familiar name please feel free to inform me.

Participant 1: Hi, I'm [name redacted].

Okay, let's get started. The first question is, in the questionnaire you were each asked about the phenomenon of Wikiholes. I'd like you to elaborate on your experiences with this phenomenon and perhaps with a particularly memorable story or result of this experience.

P1: Well, actually, this happened to me the other day. I was, um, for some reason, I got referred to the movie "Titanic" – the Wikipedia page for the movie "Titanic" – and that led me to the actual page for the actual "Titanic," which led me to "casualties," like, the casualty list in the Titanic, and then *that* page listed the captain who, um, who like was said to go down with quote a "stiff upper lip." "Stiff upper lip" was highlighted and I was like what, why is this highlighted? So I clicked on that. I guess it's a common, like, a British... [short pause] like a matter of pride for British people – keeping a stiff upper lip in periods of adversity. So I thought that was really interesting.

But I couldn't find anything that caught my eye beyond that in the captain's page, so I kind of like, went back. I went all the way back to the Titanic and started looking at like ... you know, how they built the ship at the time. Which was like, I think they – it was like riveted, they had riveted bolts in the hull which they don't do since then. So I was kind of like going down this hole where I was looking at, you know, common practices in ship building and stuff like that. A half-hour later I sort of came to and I realized that I actually had to do work...

[short laugh] As you said, you sort of "came to" out of that experience. Is that a sort of particular feeling that you have upon surfacing from your time on Wikipedia, is that a common feeling that happens?

P1: Uh yeah. It's sort of... I get so engrossed in what I'm doing, in surfing Wikipedia or browsing Wikipedia or whatever you want to say that I, I just get, like, subsumed in it. And usually it's because I don't want to do something I'm supposed to be doing. But I have a tendency towards wanting to know things. So I have this sort of curiosity, I think, and, at least on the surface level, I want to know lots of things. So when I – getting back to the question – when I “come to,” I feel like I spent my time doing something pleasurable, but I've also not necessarily spent time doing what people might see as productive.

Is there a particular emotion you can point to with that feeling, or is it a little more vague?

P1: It's pretty vague. It's more like [laughs under breath] it ranges from, like, satisfaction to a little twinge of guilt sometimes whenever I, you know.. [laughs again]

I think we can move on from that. You said this happens... it happened more than once, it hasn't happened just one time. So, are there any patterns in your behavior that you've noticed when you find yourself “falling down the Wikihole,” so to speak?

P1: Yeah, I think, especially, like I said, when I have to do something and I'm, like, procrastinating, I think it makes me more susceptible to start browsing on Wikipedia. The same is true for other sites as well. It's just like, I think Wikipedia is a better cover for... instead of like wasting time on Facebook or Twitter or something I can pretend that I'm being productive by looking at Wikipedia because it's a... [short pause] it's ostensibly an informative source. I can kind of pretend that I'm doing something to like, better myself, as opposed to just wasting time even though it might just be... I might just be wasting time.

And in that story you told earlier, you said you went down one path and went as far as you were interested with the “stiff upper lip” and came back to the original page then went down a completely different path. Is that a similar pattern where you go down multiple different avenues?

P1: Yeah, I think that happens a lot. [pause] I don't know if I go backwards as frequently as I do, but perhaps I do. There's probably some main articles that have more detail in it, and so more links to different things. And yeah, if I notice a particularly interesting thing in blue then I'm like, “oh.” You know, particularly interesting – how can I say this – it's not like really provocative... I guess just an interesting thing in blue that denotes a link to something else, I'll usually click on it, and then, you know, that link usually has something else that is interesting that I click on 'til I've whittled myself down to [short laugh] in this case I like whittled myself down to this little nub. It wasn't a very long article at all. It wasn't very detailed. It didn't have a lot of links. So I was like, oh, you know, my path is dead here; I need to go back.

So that's something that you're - you've already been describing but you haven't explicitly said, that multiple links on one page and not so many on

another, that that relates to the structure of the website as a whole. So have you ever thought critically about how Wikipedia is structured as a website, especially compared to other sites, and if you have what are your thoughts? If you haven't maybe take a moment to consider... similarities and differences.

P1: I think just because it's so self-contained, that like there are so many Wikipedia pages and so many links and, you know, the editors I guess – I'm not an editor by any means but I, I've surmised, or figured, that editors are encouraged to include links wherever possible because there are so many on any given page, usually. That, you know, it's a really good way to – they really got the format down, if you really want to get lost in like a sea of information. And they kind of encourage it too, don't they? Because on the sidebar there's a thing called Random Article that you can click, and you can just click it over and over again, and find, you know, completely random objects. And sometimes they're not interesting and sometimes they are, but when you do find something interesting, it's like kind of a... [short laugh] kind of a treat. It's almost so it kind of keeps you clicking.

So you think that particular feature affects how you interact with it [Wikipedia]? That having that structure of it...

P1: Sometimes I forget about it, and sometimes I remember it and then I... there's a pretty low probability, in a random article, in finding something truly interesting but... [pause] I think it's a pretty low stakes gamble, that you can just kind of – it's almost like someone playing video poker, where they just, you know, put the order in over and over again.

Right. Okay, that's really interesting. How about we move on to next piece. Has your experience with or interaction on "Cool Freaks Wikipedia Club" affected your activity on Wikipedia?

P1: Yeah, a little bit. I can't tell if... [pause] it's a chicken or an egg thing, that my activity on Wikipedia or my inclinations led me to a page or if... You know, once I joined the page like I became more curious about the way they use it. I think it's a little of both. I think I am better nowadays at seeking out odd pages than I used to be, or better at finding very idiosyncratic things than I used to be, because I've been subsumed or – not "subsumed" – like, on the periphery of this little Facebook club for a while. I see all these articles, all these strange articles pop up in my Facebook timeline all the time. [short laugh]

So, awareness of what to look for, or noticing something when you see it...?

P1: It's almost, like, memetic, isn't it? There's a lot of repeat posts that pop up on this page, like [short pause] probably the most famous one is the toast sandwich...

I think I've seen that one as well. Alright, well this has been great so far. We're just going to move along - wrap up with our final question. Do you

think the ways in which we use Wikipedia have changed over time? If so, how?

P1: Um...

And just to clarify, “we” as you know a society as a wider group...

P1: The royal “we.”

...Not specifically “we,” the Facebook group.

P1: Um, Yeah. I think especially... [pause] not when it first came out, but when it first started being popular, when I was like thirteen, fourteen, like 2003, 2004 – I think it came out in 2001 or something like that. So back then there was all this talk, like, is it trustworthy? There’s not enough regulation there, et cetera, et cetera. And since then, I mean, you still hear all of that, but it’s really built up its knowledge base and there’s so much that you can do now that it’s really opened up a lot more possibilities, I think, beyond just something your teachers warned you about plagiarizing [from]. I don’t know. I think it’s opened up a lot of opportunities for things like Cool Freaks’ Wikipedia Club where you’re using information for pleasure or leisure or however you want to say it.

So, in other words, *how* you’re using it, not the *purpose* it’s being used for? Is that what you’re leaning towards here?

P1: Yeah, I think that’s how I interpreted the question. Just the purpose – I mean, people do still use it for research and background research and things like that but it’s certainly not the only thing and it’s reached this omnipresent status in society where it’s, like, all over the place and it’s kind of been demystified. [short pause] You know, teachers don’t worry about Wikipedia as much anymore. It’s just kind of like a thing that exists and it’s part of all of our lives.

Well, that sounds like a good note to end things on, so thank you everybody for participating! Remember, if you have any further questions, please contact us.

VIII. Codebook

a. Questionnaire Data Coding Booklet:

Variable label	Variable name	Variable definition	Data Measurement	Attributes	Coding
Q0	Participant #	Unique coded identifier for participant	Nominal	None	As recorded
Q1	Age	Age of respondent in years	Ordinal	19-24 25-29 30-34 35-39 40-44 45-49 50+ No response	1 2 3 4 5 6 7 99
Q2	Gender	Gender identification(s) of respondent (respondent may choose all that apply)	Nominal	Man Woman Non-binary Two-spirit Agender Other Prefer not to say No response	1 2 3 4 5 6 7 99
Q3	Education	Respondent's highest completed level of education	Nominal	Some secondary education High school diploma Some post-secondary education (college or university) Associate degree Bachelor's degree Master's degree Ph.D. No response	1 2 3 4 5 6 7 99

Q4	Frequency of Wikipedia use	How often respondents use Wikipedia	Nominal	Multiple times per day About once a day About *once every 2-3 days About once a week About 2-3 times per month Once a month or less No response	1 2 3 4 5 6 99
Q5	Amount of time	Average time respondents spend on Wikipedia	Ordinal	Less than 5 minutes 5 to 15 minutes 16 to 30 minutes 31 minutes to 1 hour More than an hour No response	1 2 3 4 5 99
Q6	Pages per session	Average number of Wikipedia pages respondent browses per session	Ordinal	1-2 3-4 5-6 7-8 9-10 11+ No response	1 2 3 4 5 6 99
Q7	How you use Wikipedia	The ways in which respondents report using Wikipedia (respondents may select all options that apply)	Nominal	Research Fact-checking Finding additional resources entertainment /leisure Editing Other - please explain No response	1 2 3 4 5 6 99
Q8	Productivity	Any effects Wikipedia has on respondents'	Text	Response No response	1 99

		idea of productivity			
Q9a	Article sharing	Whether respondent has shared Wikipedia article to Discussion section of Cool Freaks' Wikipedia Club	Binary*	Yes No No response	1 2 99
Q9b	Article sharing example		Text	Response No response	1 99
Q10a	Article sharing	Whether respondent has ever shared information they found on Wikipedia outside of Cool Freaks Wikipedia Club	Binary	Yes No No response	1 2 99
Q10b	Article sharing example		Text	Response No response	1 99
Q11a	Familiarity with term "Wikihole"	Whether or not respondents have heard the term "Wikihole" before	Binary	Yes No No response	1 2 99
Q11b	Meaning of term "Wikihole"	Definition of what respondent think "Wikihole" is in own words	Text	Response No response	1 99
Q12a	Previous experience		Binary	Yes No	1 2

	with described phenomenon			No response	99
Q12b	Example of experience with described phenomenon		Text	Response No response	1 99
Q13	Alternate descriptor of described phenomenon	A term or phrase respondents have used other than "Wikihole"	Text	Response No response	1 99
Q14a	Interest in focus group:	Respondents indicate interest or disinterest in focus group participation	Binary	Yes No No response	1 2 99
Q14b	Contact information:	To be used for participation in focus group only	Text	Response No response	1 99

b. Questionnaire Data Coding Sheet:

Variable label	Variable	Participant 1	Participant 2	Participant 3	Participant n...
Q1	Age	2			
Q2.1	Gender (Male)	1			
Q2.2	Gender (Female)	0			
Q2.3	Gender (Non-binary)	0			
Q2.4	Gender (Two-spirit)	0			
Q2.5	Gender (Agender)	0			
Q2.6	Gender (Other)	0			

Q2.7	Gender (Prefer not to say)	0			
Q3	Education	5			
Q4	Frequency of Wikipedia use	1			
Q5	Amount of time	2			
Q6	Pages per Session	2			
Q7.1	How you use Wikipedia (research)	1			
Q7.2	How you use Wikipedia (fact-checking)	1			
Q7.3	How you use Wikipedia (addl. resources)	1			
Q7.4	How you use Wikipedia (entertainment)	1			
Q7.5	How you use Wikipedia (editing)	0			
Q7.6	How you use Wikipedia (other)	0			
Q8	Productivity	1			
Q9a	Article sharing	1			
Q9b	Article sharing example	1			
Q10a	Sharing outside Facebook group	1			
Q10b	Sharing outside Facebook group example	1			
Q11a	Familiarity with term, "Wikihole"	1			

Q11b	Meaning of term, "Wikipihole"	1			
Q12a	Previous experience with described phenomenon	1			
Q12b	Example of experience with described phenomenon	1			
Q13	Alternate descriptor of described phenomenon	1			
Q14a	Interest in focus group	1			
Q14b	Contact information	1			

c. Focus Group Data Coding Booklet:

Variable label	Variable name	Variable definition	Data Measurement	Attributes	Coding
Q0	Participant #	Unique coded identifier for participant	Nominal	None	As recorded
Q1	Experience with Wikipiholes	Story/anecdote about Wikipihole experience	Verbal	Response No Response	1 99
Q2	Feelings after Wikipihole	Emotions/state of mind after Wikipihole experience	Verbal	Response No Response	1 99
Q3	Wikipihole behavioral patterns	Self-observed behaviors during Wikipihole experience	Verbal	Response No Response	1 99
Q4	Wikipedia website structure	Perceived influence of Wikipedia's website design on Wikipihole experience	Verbal	Response No Response	1 99

Q5	CFWC influence on individuals	Effects Cool Freaks' Wikipedia Club has had on respondent's Wikipedia use	Verbal	Response No Response	199
Q6	Wikipedia use over time	Personal observation on how society's use of Wikipedia may have changed	Verbal	Response No Response	199

d. Focus Group Data Coding Sheet:

Variable label	Variable	Participant 1	Participant 2	Participant 3	Participant n...
Q1	Experience with Wikipiholes	1			
Q2	Feelings after Wikipihole	1			
Q3	Wikipihole behavioral patterns	1			
Q4	Wikipedia website structure	1			
Q5	CFWC influence on individuals	1			
Q6	Wiki use over time	1			

Appendix A. Pre-Questionnaire Information & Consent Form

Title of project:

Falling Down the Wikiphole: An Inquiry into Idle, Time-Intensive Wikipedia Browsing

Researchers:

[Name(s)]

Institution:

[School and faculty]

Contact Information:

[Address]

[Phone number]

[E-mail address]

In this study, we are investigating the “Wikiphole” phenomenon. Your participation will be helpful in the success of this project. Your participation is voluntary, and the information you provide will remain anonymous. All data collected will be encrypted and stored on a password protected database separate from any identifying information. If, for whatever reason, you choose to withdraw after beginning the questionnaire, there will be no consequences or repercussions.

At the end of the questionnaire you will be given the choice to opt in to participation in further in-depth research on this topic. If you choose to do so the information you provide to be contacted will be stored separately from all other data and all of your answers to the questionnaire will remain anonymous.

Please feel free to contact us if you have any questions or would like further information at [email address, phone number].

I have read and understand the terms of my participation, and I consent to this questionnaire.

Appendix B. Focus Group Informational E-mail

Hello [participant name],

A few weeks ago, you completed a questionnaire about the Wikiphole phenomenon. We are contacting you because you have indicated that you were open to participating in further research on this topic. Your participation will help us gain a more nuanced and in-depth understanding of the Wikiphole phenomenon and the factors that lead to it.

If you are still interested in participating in this research, please carefully read and complete the attached electronic information/consent form, and email the completed form back to us in .pdf format.

Thank you for your time,

[research team]

[credentials]

Appendix C. Focus Group Consent Form

Title of project:

Falling Down the Wikihole: An Inquiry into Idle, Time-Intensive Wikipedia Browsing

Researchers:

[Name(s)]

Institution:

[School and faculty]

Contact Information:

[Address]

[Phone number]

[E-mail address]

Procedure: This further research will take the form of a focus group using open-source conference software called AnyMeeting. The focus group will take no more than 45 minutes. During the focus group, you will be asked a series of questions, which will then be discussed in a group format. The researchers listed above will serve as facilitators of the discussion.

The session will be audio-recorded. We request that you possess a functional computer microphone, headset, or earpiece for use during this focus group session. You may choose whether you want to use a video feed in conjunction with your audio feed or an audio feed only.

It is unlikely there will be any harms or risks associated with this study. However, should you feel uncomfortable at any time you do not need to continue answering questions or speaking with other group members.

Participation is voluntary, and all answers will remain anonymous. All data collected will be stored without identifying information, and will be encrypted and password protected. Please feel free to contact us if you have any questions at [researcher's contact information].

If, for whatever reason, you choose to withdraw after signing this consent form or during the study, there will be no consequences and you will still receive compensation. All participants will be compensated with a \$20 gift card chosen from the organizations below or equal value donation to one of the following charitable organizations.

In order to ensure your privacy, only the researchers listed at the top of this page know you are participating. Other members of the focus group will not know your full name, and all data collected from the session will be coded so that each participant is identified only by a number. Once the study is completed, an archive of the data will be maintained, but will contain no identifying information.

The study is expected to be completed by [MM/DD/YYYY]. If you would like to receive a summary of the results and/or access to the published copy of the study, please indicate

this below. If you choose to receive results, they will be sent to the email address you have already provided.

I would like to receive:

- summary
 - publication
 - no results
-

Please indicate the dates and times you would be available to participate in the focus group.

All times are in Pacific Standard Time (UTC -8). Please compare with your own time zone and adjust accordingly.

[date]

- 12:00 - 12:45 pm
- 1:00 - 1:45 pm
- 2:00 - 2:45 pm
- 3:00 - 3:45 pm
- 4:00 - 4:45 pm

[date]

- 12:00 - 12:45 pm
- 1:00 - 1:45 pm
- 2:00 - 2:45 pm
- 3:00 - 3:45 pm
- 4:00 - 4:45 pm

[date]

- 12:00 - 12:45 pm
- 1:00 - 1:45 pm
- 2:00 - 2:45 pm
- 3:00 - 3:45 pm
- 4:00 - 4:45 pm

[date]

- 12:00 - 12:45 pm
- 1:00 - 1:45 pm
- 2:00 - 2:45 pm
- 3:00 - 3:45 pm
- 4:00 - 4:45 pm

Once we have received all responses, we will contact you to let you know the exact date and time of the focus group.

I would like my compensation in the form of a \$20 gift card, OR a donation to the following organization. (Select one)

Gift Cards:

- Starbucks
- Amazon
- Visa Gift Card
- The Gap

Charitable Organization:

- Wildlife Conservation Society
 - UNICEF
 - Doctors Without Borders
 - Human Rights Watch
-

If you have any questions about this study, or if you would like more information, please contact us at [contact information].

- I have read the information outlined above.
- I have had the opportunity to ask questions and receive additional information.
- I understand if I agree to participate, I may withdraw at any time with no consequences.
- I agree to participate in this study.

E-signature: _____

Date: [MM/DD/YYYY]

References

- André, P., Teevan, J., & Dumais, S. (2009). From x-rays to Silly Putty via Uranus: serendipity and its role in web search. Paper presented at the proceedings of the SIGCHI Conference on Human Factors in Computing Systems, Boston, Mass, 2033-2036. Retrieved from <https://dx.doi.org/0.1145/1518701.1519009>
- Fidel, R. (2012). What is human information interaction? In Human information interaction: an ecological approach to human behavior. Retrieved from <https://muse-jhu-edu.ezproxy.library.ubc.ca/chapter/763838>
- Lampecht, D., Lerman, K., Helic, D. & Strohmaier, M. (2017). How the structure of Wikipedia influences navigation. *New Review of Hypermedia and Multimedia*, 23(1), 29-47. Retrieved from <http://www-tandfonline-com.ezproxy.library.ubc.ca/doi/abs/10.1080/13614568.2016.1179798>
- Lawrence, K. (2015). Today's college students: skimmers, scanners, and efficiency-seekers. *Information Services and Use*, 35, 85-93. Retrieved from <http://ezproxy.library.ubc.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=109101224&site=ehost-live&scope=site>
- Lehmann, J., Müller-Birn, C., Laniado, D, Lalmas, M., & Kaltenbrunner, A. (2014, September). Reader preferences and behavior on Wikipedia. Paper presented at the proceedings of the 25th ACM Conference on Hypertext and Social Media, Santiago, Chile, 88-97. <https://dx.doi.org/10.1145/2631775.2631805>
- McCay-Peet, L. and Toms, E.G. (2010). The process of serendipity in knowledge work. Paper presented at the Third Information Interaction in Context Symposium, New Brunswick, New Jersey, 377-382. Retrieved from <https://doi-org.ezproxy.library.ubc.ca/10.1145/1840784.1840842>

- Prakash, A., Chinnacotla, M.K., Patel, D. & Garg, P. (2015). Did you know? Mining interesting trivia for entities from Wikipedia. Paper presented at the proceedings of the Twenty-Fourth International Joint Conference on Artificial Intelligence (IJCAI 2015), Buenos Aires, Argentina, 3164-3170. Retrieved from <https://www.ijcai.org/Proceedings/15/Papers/446.pdf>
- Rodi, G.C., Loreto, V., & Tria, F. (2017). Search strategies of Wikipedia readers. PLOS ONE, 13(2), 1-16. Retrieved from <https://search-proquest-com.ezproxy.library.ubc.ca/docview/1864404923/fulltext/2A9AADE40138425FPQ/1?accountid=14656>
- Tsurel, D., Pelleg, D., Guy, I., & Shahaf, D. (2016). Fun facts: Automatic trivia fact extraction from Wikipedia. ArXiv:1612.03896 [cs.SI]. Retrieved from <http://arxiv.org/abs/1612.03896>