**Research Ethics**

**TITLE: ETHICAL CHALLENGES IN ONLINE RESEARCH: PUBLIC/PRIVATE PERCEPTIONS**

**J**ournal: Research Ethics

Manuscript ID: RE-15-0017

Manuscript Type: Original Article; Empirical

Keywords: World Wide Web, Internet, Ethics, Online Research, Web Forums

**ABSTRACT:**

With its wealth of readily and often publicly available information about web users lives, the Web has created new opportunities for conducting online research. Although digital data is easily accessible, ethical guidelines are inconsistent about how researchers should use them. Some academics claim that traditional ethical principles are sufficient and applicable to online research. However, the Web poses new challenges that compel researchers to reconsider concerns of consent, privacy and anonymity. Based on doctoral research into the investigation of online medicine purchasing, this paper presents a case study involving online forums and reviews the existing ethical guidance surrounding the Web. The suggestion is that new ethical guidelines, particularly in relation to informed consent and participant’s own perceptions of what is public or private, are needed due to the unique challenges of online research.

**INTRODUCTION**

*“*[If] *I were you I wouldn't have bothered announcing it, its a public forum so just get on and do.*” (Forum member’s response to being informed about research utilising online forum posts).

*The study involved the collection of text publicly available on web forums. Despite the forums being publicly accessible, the main concern from the ethics committee was regarding the avoidance of covert observation; how would the researcher know that users were aware a researcher was present on the forum? Therefore the study aimed to be overt within the constraints of Web research, and the researcher attempted to alert users to her presence via the production of posts on the forums. However, the application of pre-digital guidelines caused further complications and reactions, such as the above example, from the online community.*

The Web has opened up new research possibilities, indeed Eynon et al. (2008) describe it as a huge “social science laboratory”. It offers rich data, both quantitative (e.g. user statistics) and qualitative (e.g. user generated textual content) and provides access to a wealth of first-hand accounts and experiences. Policies and frameworks governing research ethics predate the Web, and the global reach of the Web means there are distinctive legal and ethical regulations in different jurisdictions. The use of traditional ethical guidelines for online research is contentious (Grinyer, 2007:1). It has proved very difficult to operationalise existing guidelines for research on the Web.

Online research has created new challenges for ethics committees and institutions as well as for researchers: as Ackland (2013:43) succinctly puts it “Ethical guidelines for use of digital trace data are still a moving target.” New digital online spaces force researchers to rethink established ethical principles of informed consent, privacy, and anonymity. Web data includes content extracted from online environments including community websites such as forums, individual’s websites and blogs, social network sites such as Facebook, and microblogs such as Twitter. These forms of data are not produced for research and are distinct from other online data sources such as surveys or interviews, which have similar ethical requirements as their offline counterparts. Web use and the technologies surrounding the online world are changing rapidly and whereas in the early days of the Web a significant level of proficiency and knowledge of computing was required to publish online, nowadays it is relatively easy for anyone to create (and potentially conduct research about) online content.

This paper draws on doctoral research exploring accounts and practices surrounding buying medicines online. As the vignette at the beginning of this paper shows, the application of research ethics to studying the Web is problematic. This research highlighted four specific challenges for Web research involving qualitative data or texts, namely i) should researchers use data/information that is public or openly accessible on the Web without seeking consent? ; ii) is informed consent feasible in the online environment?; iii) how can anonymity be preserved?; and iv) how should researchers deal with situations where distress and disturbance is caused to online communities? The paper explores each of these issues and argues that while online research appears to be accountable to established ethical ‘rules’, current ethical guidelines are confusing and not fit for purpose. We argue that the ethical standards should be updated to accommodate the new modes of data collection.

**THE ROLE OF RESEARCH ETHICS**

Ethics can be understood simply, as morals or rules of conduct. Some core tenets are shared by various legislation and policies relating to research ethics and wider human rights, including the rights to dignity, autonomy, protection, safety, maximisation of benefits and minimisation of harms. Many of these high-level principles of research ethics and ethical treatment of persons are codified in national and international documents, such as the UN Declaration of Human Rights, the Nuremberg Code, the Declaration of Helsinki, and the Belmont Report. These offer some protection to individuals, which can be extended to them as research subjects. For example at an international level Article 8 of the European Convention on Human Rights (ECHR) (HRA 1998) protects the right to respect for private and family life, and correspondence. In the UK ethical governance relating to personal information is linked, but not restricted to legislation enshrined in the European Convention and the UK Data Protection Act 1998 (DPA), and applies to research data. In addition to these national and international laws ethical considerations in research are also influenced by guidance issued by learned societies (e.g. the British Sociological Society). While these do not carry the weight of the legislation, which can be enforced, these professional codes of conduct for research if breached may be dealt with by the relevant learned society. A formal Research Ethics Committee (REC) - or Institutional Review Boards (IRB) in the USA - typically reviews research involving human participants prior to commencement. RECs draw on legislation and a range of policies and practices to assess applications. Where research is Web-based, RECs, and learned societies, are having to catch up with the fast paced changes in Web technologies and the nature of online data and may find that traditional ethical guidance and practice cannot keep up.

**CURRENT GUIDANCE**

Professional and learned societies have codes of conduct or best practice guidance for research and some have developed versions for online or ‘virtual’ research. These aim to provide frameworks for researchers to consider the ethical challenges that they encounter in their online research. The learned societies that offer specific guidance about ethics for Web research include: The Association of Internet Researchers; The British Educational Research Association; The Market Research Association; The Council of American Survey Research Organizations; The British Psychological Society; and The British Society of Criminology. These will be briefly summarised to provide an overview of the current guidance available to online researchers.

The Association of Internet Researchers (AoIR) has produced some ethical guidelines for online research (Ess and AoIR, 2002; AoIR, 2012)[[1]](#footnote-1) but this has been subject to some debate and disagreement (Eynon et al., 2008:23). Lomborg (2013) notes that the AoIR advocates a bottom-up case-based approach to research ethics. This emphasises that ethical judgment must be based on a sensible examination of the unique object and circumstances of a study, the research questions, the data involved, the type of analysis to be used and the way the results will be reported.

The British Educational Research Association Ethical Guidelines (BERA) (2011)[[2]](#footnote-2) has a particular focus on avoiding harms when considering online research. Hammersley and Traianou (2012) discuss the minimisation of harm – specifically, whether a research strategy is likely to cause harm and if so how serious it would be, and whether there is any way in which it could be justified or excused. Harms might arise from asking for consent, or through the process of asking for consent, and in the online context can apply to Web forum members and the researcher – the act of sending participation requests may be considered intrusive, but can also provide a public mechanism for debating with or challenging the researcher.

The Market Research Association (MRA) guide to the top 16 social media research questions (2010)[[3]](#footnote-3) stipulates that researchers should learn about and be comfortable with important explanatory variables beyond traditional respondent demographics, such as how different websites generate and facilitate different types of data (e.g. whether data is more positive versus negative, descriptive versus condensed etc.). In social media research it is commonly understood that conversations are generally public and viewable so that any individual under observation may not be aware of the presence of a researcher.

Informed consent is encouraged when research might prejudice the legitimate rights of respondents, and researchers are advised to exercise particular care and consideration when engaging with children and vulnerable people in Web research; however, the Market Research Society/Market and Social Research (Esomar) states that if it is public data there is no need for informed consent.

The Council of American Survey Research Organisations’ (CASRO) social media guidelines (2011)[[4]](#footnote-4) suggest that where participants and researchers directly interact (including private spaces), informed consent must be obtained in accordance with applicable privacy and data protection laws. However, it is unclear whether pure observation, where data is obtained without interaction with the participant, would fall under this remit, as no direct reference to this type of research is offered. The British Psychological Society (BPS) and the British Society of Criminology (BSC) have also updated their guidelines to include online research.[[5]](#footnote-5) These take into account the problems that may arise, such as legal and cultural differences across jurisdictions, online rules of conduct and the blurring of boundaries between public and private domains.

The frameworks for the AoIR, BERA, MRA, CASRO, BPS and BSC provide some directions for online research but do not address all the ethical challenges that can arise. In addition to formal guidance from learned societies, some individual researchers have also suggested ethical processes for undertaking online research. Nind et al. (2012) refer to the tensions inherent in the interaction between ethics and methodological innovation, and recommend exercising caution in these new Web spaces. They suggest adopting a reflexive position and demonstrating a strong commitment to acting responsibly while moving forward methodologically. Kozinets has written extensively on online research (Kozinets, 2002, 2006), and contends that the researcher should fully disclose their presence, affiliations and intentions to online community members during any research. He states that researchers should ensure the confidentiality and anonymity of their informants and places the onus on the researcher to seek and incorporate feedback from members of the online community being researched. The netnographic approach developed by Kozinets requires the researcher to contact community members directly and obtain their informed consent to use any specific postings for the research (Kozinets, 2002:65; Kozinets and Handelman, 1998).

However, Langer and Beckman (2005), in their study utilising online discussion boards claim that Kozinet’s ethical stipulations are too restrictive. They suggest that such ethical guidelines make sense in private online communities but are far too rigorous to be applied to all online communities. They suggest that for public online data researchers should rely on research ethics established for content analysis, which have been developed in media and communication fields. Langer and Beckman’s (2005) own data collection was based on a pragmatic position towards covert research and they claim it fully satisfies the ethical standards for content analysis of public media texts - equivalent to analysis of readers’ letters in newspapers. The disclosure of the researcher’s presence by contacting community members to obtain permission, suggested by Kozinets (2002:65), would diminish a major advantage of this work namely its unobtrusiveness. They point out that it could endanger the research project if participants opposed the research, and suggest that some users might engage in a *“spiral of silence”*, by not producing posts. This would result in misrepresentations if only the most confident and articulate users would be included in the analysis. Nonetheless Langer and Beckman’s view stands at odds with much ethical practice and moves towards increased patient and public involvement in research (Staniszewska et al., 2008) and participatory and democratic forms of research (Minkler and Wallerstein, 2011) where participants are more actively engaged.

Research utilising data from social media such as Twitter provides further examples of studies conducted without participant consent (Signorini et al., 2011; Vieweg et al., 2010; Honey and Herring, 2009). Guidelines provided by the Association of Internet Researchers,[[6]](#footnote-6) relating to the use of special interest forums for research, highlight the importance of data being easily searchable and retrievable from public searches but do not explicitly state that consent is required. The British Society of Criminology guidelines[[7]](#footnote-7) suggest that informed consent should usually be sought, but other researchers counter that online data is in the public domain and that consent is not necessary (Kitchin, 2003).

**PUTTING ETHICS INTO PRACTICE IN WEB RESEARCH**

There are, then, some guidelines for online research but little consensus about good ethical practice. The experience of conducting web research raised a number of ethical challenges. The case study at the heart of this paper investigated the purchase of medicine from the Web. Web forums were studied to explore how people interact and communicate about buying medicines and to understand the types of information available for individuals wanting to purchase medicine online.

Web forums are online discussion groups where people converse about topics of mutual interest. They are comprised of strings or threads that begin when an individual creates a post via the writing of text under a subject title. Others can respond with posts of their own, and multiple posts are connected together to create the strings or threads. Content can be gathered easily by a computer programme or by manual copy and paste functions. The most common term associated with the collection of online data using computer software techniques from websites is web scraping (or harvesting). Web scraping is similar to web indexing, which indexes information on the web using a bot (software applications that run automated tasks over the Internet) or web crawler (a bot that systematically browses the Web) and is a technique adopted by most search engines. Ackland (2013) notes that the scale and nature of the kinds of data it is possible to collect using these techniques may make it impossible to contact all of the authors of the web content.

For the doctoral study that informs this paper text data was collected from six web forums. These do not require registration to access posts and content, thus large amounts of data can be accessed with little difficulty or interaction with the group. Many public forums also have private spaces, such as members’ only areas where a username is required in order to access content.

The forums were purposively selected after searching and scoping using keyword search terms. The chosen forums had public, easily viewable discussion threads but required membership in order to comment/add posts. Before commencing the study the researcher contacted forum moderators to check that the research did not breach any terms and conditions of their sites. While no site moderators stated that the posts were unavailable for research purposes some advised against posting in the forums for fear of upsetting forum members:

 “*Thanks for getting in touch with us about the possibility of posting requests about your study within our discussion forums.*

*We tend not to sanction this kind of activity in the forums, as in the past we’ve received a considerable amount of negative feedback from our forum users about such postings, as they feel they intrude on a space where they share sensitive/personal information with other patients.”*

Following the advice of the relevant institutional Research Ethics Committee and Research Governance office, and applying Kozinets’ (2002) netnographic framework on ethics, the researcher (LS) initially joined the forums identifying herself as ‘researcher,’ and created posts under the subject title of 'Researcher requesting information on this forum' (Appendix 1). These posts provided forum members with the option of contacting the researcher if they did not wish their posts to be used.

The Ethics Committee had suggested this message cold be reposted each week to take into account the fluid membership of online groups (King, 1996 Stone, 1995). However this proved antagonistic. Some members posted abusive and suspicious comments in response to researcher posts, and pleas to be left alone: *“Please go away!”.* Some moderators removed the forum threads. The researcher’s posts provoked debate about whether permission was required *“pretty sure that we are supposed to consent to this!”* and one moderator requested payment for displaying the request. There were no responses from either members or moderators to the posts placed on two of the forums.

This highlighted very different perspectives about seeking permission to conduct research in forums. The negative reactions from the forum members and moderators suggest flaws within Kozinet’s netnography framework, which support Langer and Beckman’s claim that it is too ‘restrictive’ (Langer & Beckman, 2005). Having tried the disclosure approaches suggested, and after further discussion with the Ethics Committee the researcher in this instance decided to take a pragmatic approach and collected data from the public spaces on forums where moderators had not objected to the research and where terms and conditions did not prohibit use. Online spaces such as forums can be viewed as public documents rather than ethnographic interactions and the automatic archiving of text in such spaces makes the active presence (and disclosure) of the researcher unnecessary.

Furthermore, members of online support groups may begin to question the psychological safety of using that space if research appears to violate their trust (Frankel & Siang, 1999). By joining the forums the researcher blurred the boundaries of perceptions of what is public and private. These forums were not private spaces, by alerting members to her presence the researcher caused the members to act as if they were. Miller (2012) considers what protection is afforded to the researcher when participants respond in public forums and suggests that these research practices occupy a space beyond the reach of ethics frameworks.

Current ethical guidance does not resolve the dilemmas posed by research in these online spaces. The question of whether informed consent is necessary for public forums is inconsistently answered, nor yet is there clear advice on how to approach participants. As this study demonstrates apparently ethical procedures do not always translate well in practice. There is little consideration of how researchers should assess participants’ own ideas regarding the use of what they post online.

This paper will now explore these issues within the wider context of existing research and current guidance.

**KEY ETHICAL ISSUES**

**Informed Consent**

Informed consent is based upon the principle that potential participants should be able to make a knowledgeable decision about whether or not to participate in a study. While desirable, it is not always essential. In covert research, participants are not aware they are being studied and behaviour conducted within the public domain may be observed and researched without consent (British Psychological Society, 1993). The justification for this exception is to ensure that natural behaviour is observed in its natural context, without contamination by the researcher’s aims and objectives. However, most social science and health research relies on obtaining informed consent.

Obtaining informed consent online may involve the researcher posting to communities, the approach originally undertaken in the study discussed above, or individually contacting users and providing them with participant information sheets and consent forms to sign. For instance, Egdorf and Rahoi (1994) sought the permission of their computer- mediated communication (CMC) groups prior to conducting research on publicly available lists and archives. The use of such material without the permission of its authors was viewed as potentially damaging to the research process, especially if group members were to discover their words had been used without their knowledge or consent. However, a case has been made by the Scientific Affairs’ Advisory Group (SAAG) (Kraut et al., 2004) that informed consent can be waived if the research involves minimal risk and does not negatively affect the rights and wellbeing of subjects, if the research could not be practicably carried out without the waiver. The SAAG do suggest that wherever appropriate subjects will be debriefed and provided with additional relevant information after participation. Posting debriefing messages on websites can do this, but it does raise concerns about whether online community members comprehend the research that has been undertaken (Kraut et al., 2004).

Some commentators/researchers have argued that messages within online communities should not be collected without the author providing prior permission (Marx, 1998; King, 1996). Wilson and Atkinson (2005) ask whether online ethnography might be a form of “electronic eavesdropping”. If individuals post information on public profiles to be shared with friends and peers this may not mean that they have consented for this information to be collated, analysed and published (Eysenbach and Till, 2001). Hudson and Bruckman (2004) found that while it was considered ethically acceptable to capture and analyse interactions and conversations in a public square without consent, this model did not match the expectations of their participants in online chatrooms, who felt

strongly that “one may not ethically record an otherwise ephemeral medium without consent from participants” (2004:118).

There are practical difficulties involved in obtaining informed consent from all members of online communities. Not everyone may see posts, some members leave but their contributions remain visible. Langford (1996) suggests that researchers wishing to conduct analysis of posts and archives should consult the terms of electronic forums, which may openly request that research should not be carried out. Where clear directives do not exist, it may be possible to contact the list moderator and gain permission to conduct research but clearly moderator permission cannot be viewed as consent by all members of the group (Reid, 1996). Whether consent needs to be obtained from individual contributors or from system administrators is fraught with uncertainty. Ownership/intellectual property rights to data may be addressed in the terms and conditions, but forum moderators cannot legally obtain consent for individual members.

As this research revealed, seeking such permission from moderators produces varied responses and can create its own ethical problems. In other studies, researchers who sought informed consent found similar unforeseen impacts on group processes. King (1996) cites one member of an email support group who, in response to continual posts to the list from people wishing to conduct research, refused to *“open up”* online to be *“dissected”* (1996:122). Hewson et al. (2003) also question whether contacting potential participants may be viewed as “spamming”, itself an invasion of privacy (Hewson et al., 2003:40).

**The Public/Private Debate**

Individual’s expectations of privacy in online environments which are publicly viewable, such as social media and discussion groups, may be different to their views of communications offline, or in private digital correspondence such as email (Smith, Dinev and Xu, 2011). It is not always possible to determine whether users are aware of the public status of their contributions, although there is the suggestion that people may be aware of the possibility of being ‘watched’ (Mann and Sutton, 1998). Individual and cultural definitions and expectations of privacy are contested and changing. Frankel and Siang (1999) highlight the *“blurred distinction between public and private domains”* (Frankel and Siang, 1999:1-2) and suggest that people may be more open online due to a false or exaggerated expectation of privacy (Frankel and Siang, 1999:6). They argue that researchers should assesses the privacy of data and how providers view the information shared, so that we can *“develop a technological understanding of the issue and then [expand] this understanding to include the psychological perspective of the participants”* (Frankel and Siang, 1999:11).

Other commentators have attempted to clarify the boundaries of public data for research (Sveningsson, 2003; McKee and Porter, 2009). According to the AoIR ethical guidelines public forums can be considered more public than conversations in a closed chatroom (Ess and AoIR, 2002:5, 7). Hence, *“the greater the acknowledged publicity of the venue, the less obligation there may be to protect individual privacy, confidentiality, right to informed consent, etc.”* (Ess and AoIR, 2002:5). Basset and O’Riordan (2002) suggest all such discourse lies de facto in the public sphere, but this is countered by Bakadjieva and Feenberg (2001) who argue that the type of research and corresponding relationships between the researcher and the subject have an impact on whether or not a space should be considered public or private.

Online researchers have accepted that there are expectations of a degree of privacy by Web users. Though conversations may occur in online public spaces, the content could be private - sometimes people disclose personal information that could identify them. Nissenbaum points out that, in these types of mediated contexts, *“what people care most about is not simply restricting the flow of information but ensuring that it flows appropriately”* (2011:2). The accessibility of online discussions provides a flow of public data but some researchers question whether the availability of information on the Web necessarily makes this information public. For example, Heath et al. (1999, cited in Grinyer, 2007:2) suggest that online research involving “lurking” encroaches on privacy and creates an unequal power relationship. Lurking, where someone observes but does not participate or announce their presence in online communities is a tactic adopted by researchers wanting to undertake *“naturalistic research”* (Paccagnella, 1997; Hine, 2000) but one that raises these concerns about the boundary between public and private. The Web allows users to view communication; posts and messages may be “overheard” by stumbling upon them via links and web searches. Moreover, these data can stay online and be accessible for many years (or even forever) increasing the risks of disclosure[[8]](#footnote-8).

The discussion above indicates that privacy in the context of online research is a problematic issue. One way to protect privacy is anonymisation. Anonymising data is a process designed to protect research subjects and their personal information, often undertaken to satisfy legal requirements such as the DPA 1998. However, here too, working ethically is challenging.

**Anonymity**

Research reports aim to provide descriptions and explanations that are accessible and verifiable. One potentially harmful outcome of research, however, is the risk of disclosing an individual's identity, and it is the responsibility of the researcher to employ preventative measures such as anonymity (SRA, 2003:38-9) to mitigate such harm. Although complete anonymity may be difficult to ensure, it is advised to remove all identifying data prior to publication, and where an individual is identifiable, explicit consent is required before publication (Wiles, 2013). In a similar vein, the British Sociological Association advises “err[ing] on the side of caution” (BSA, 2002:5) with respect to Web data. Their guidance suggests that steps should be taken to protect individuals participating in research by removing all names and any identifying information in reports, publications and in stored data. URLs or “links” to forum websites should not be provided, and other personal details should be disguised. Bruckman (2002) suggests adopting a “moderate disguise”, using verbatim quotations but changing names and identifiable details. This approach was also adopted in Hookway's (2008) study of morality in everyday life, where he prioritised the protection of his participants' identity over providing credit to them as authors (Hookway, 2008:106).

Deciding when it is necessary to cite a Web user by their name (or online pseudonym) is problematic. Some Web users may not want to remain anonymous, for example writers of blogs, and indeed in such cases using blogs without citation would infringe copyright or intellectual property. However, whether bloggers should automatically be viewed as authors is not definitive (Snee, 2013). Bassett and O’Riordan (2002:244) argue that in such cases, rather than maintaining anonymity, researchers should acknowledge the user's authorship and cite their texts as they would more traditional media, but as Ess (2006) points out, this may compromise anonymity. Removing identifying data alone will not guarantee anonymity as verbatim quotes can often be traced back via search engines to the original website and thence to the forum member who made them. This poses an additional challenge for researchers. Some data can be summarized without losing meaning; words or other details can be removed or altered to reduce discoverability. It is not clear that direct quotations from public sources require permission, though the general principles of ethics discussed suggest that this might be desirable.

**CONCLUDING COMMENTS**

Online research has opened up opportunities to study hard to reach groups including groups regarded as deviant or criminal. There is interesting research on digital pirates (Cooper and Harrison, 2001), hackers (Mann and Sutton, 1998), identity thieves (Holt and Lampke, 2010), paedophilia (Durkin and Bryant, 1999) and prostitution (Blevins and Holt, 2009) that provides insights about groups that would be difficult to access without these methods. Beyond this, the Web opens up access to vast ‘naturally occurring’ data, on an unprecedented scale, that is of interest to researchers (Burnap et al., 2015;). The onus remains on the researcher to manage potential harm and risk to individuals and groups when conducting research, but applying traditional ethical guidelines to online research does not work well in practice.

This paper was provoked by attempts to undertake online research and comply with current ethical guidance. Initially the researcher tried to obtain informed consent but when this was blocked by some forum moderators, and on advice from ethical committee, she collected public data and adopted the role of “lurker”. Attempting to collect data overtly revealed the shaky boundaries between public and private data online. Despite a vast amount of formal ethical guidance, doing online research ethically remains challenging. The researcher and her supervisors struggled to navigate ethics because of a lack of relevant guidance and controversy over the ‘right’ course of action. Attempts to follow the “rules” regarding informed consent backfired. Even apparently simple practices such as anonymisation were problematic because digital textual data source can often be traced. These issues pose new challenges for researchers and suggest that it is time for us to rethink ethical guidance and procedures, especially in regards to informed consent in online spaces. We need to understand online public/private distinctions and participants’ own perceptions regarding their contributions to Web forums being used for research purposes. Alongside updated guidance and procedures, members of RECs need training and education about ethical issues in online research, especially regarding informed consent. Our research suggests that the convention that all research participants should give full and free consent to participating in research is, in the online context, neither possible or necessary.

**DECLARATION OF CONFLICTING INTERESTS**

This research was funded by the EPSRC Digital Economy Programme. The authors declare that there is no conflict of interest.

**APPENDIX 1**

**Notice placed on web forums**

**Researcher using and requesting information on this forum (week /8)**

My name is Lisa Sugiura. I am a PhD student of the Web Science Doctoral Training Centre, Faculty of Health Sciences, University of Southampton. I am currently conducting a research study titled “Understanding the purchase of medicine from the Web.” I have joined this forum in order to obtain information about the purchase of medicines online. I will be looking at posts that are on this forum, so some information that you supply may be used for research purposes and included within the thesis and any accompanying publications. However, no identifying data will be obtained such as usernames, age, location etc. only the posts. This data will only be held on secure computers for the duration of the study, after which it will be permanently destroyed. I will be collecting data for the duration of eight weeks, commencing ….*date*……… and finishing ………*date*…..

For further information on how your information will be used, how the security of your information will be maintained and your rights to access your information, or if you are unhappy for your posts to be used within this research please contact me:

Lisa Sugiura *email address*

**REFERENCES**

1.Ackland, R. (2013). Web social science: Concepts, data and tools for social scientists in the digital age. Sage.

2. Bakardjieva, M. & Feenberg, A. (2001). “Respecting the Virtual Subject, or How to Navigate the Private/Public Continuum.” Online Communities: Commerce, Community Action, and the Virtual University, 195-214.

3. Bassett, E. H. & O'Riordan, K. (2002). “Ethics of Internet Research: Contesting the human subjects research model.” Ethics and Information Technology, 2, 233-47.

4. Blevins, K. & Holt, T. J. (2009). “Examining the virtual subculture of johns.” Journal of Contemporary Ethnography, 38, 619–48.

5. Bruckman, A. (2004). “Opportunities and challenges in methodology and ethics.” In: Johns, M. D., Chen, S. L. S. & Hall, G. J. (eds), Online Social Research: Methods, Issues and Ethics. New York: Peter Lang.

6. Burnap, P., Rana, O., Williams, M., Housley, W., Edwards, A., Morgan, J., & Conejero, J. (2014). COSMOS: Towards an integrated and scalable service for analysing social media on demand. International Journal of Parallel, Emergent and Distributed Systems, (ahead-of- print), 1-21.

7. Cooper, J. & Harrison, D. M. (2001). “The social organization of audio piracy on the Internet.” Media, Culture, and Society, 23, 71–89.

8. Durkin, K. F. & Bryant, C. D. (1999). “Propagandizing pederasty: A thematic analysis of the on-line exculpatory accounts of unrepentant pedophiles.” Deviant Behavior, 20, 103–27.

9. Egdorf, K. & Rahoi, R. L. (1994). “Finding a place where ‘we all want to hear it’: E-mail as a source of social support.” In: annual meeting of the Speech Communication Association, New Orleans, LA.

10. Ess, C. & the AoIR ethics working committee (2002). Ethical decision-making and Internet Research: Recommendations from the AoIR Ethics Working Committee. Available at: <http://aoir.org/reports/ethics.pdf>.

11. Ess, C. (2006). “Ethical pluralism and global information ethics.” Ethics and Information Technology, 8(4), 215-26.

12. Eynon, R., Fry, J. & Schroeder, R. (2008). “The Ethics of Internet Research.” In: Fielding, N., Lee, R. M. & Blank, G. (eds), The SAGE Handbook of Online Research Methods. London: SAGE, 23-41.

13. Eysenbach, G. & Till, J. (2001). “Ethical issues in qualitative research on internet communities.” British Medical Journal, 323, 7321, 1103-5.

14. Frankel, M. & Siang, S. (1999). “Ethical and Legal Aspects of Human Subjects Research on the Internet.” American Association for the Advancement of Science Workshop Report. Available at: [http://www.aaas.org/spp/dspp/srfl/projects/intres. main.Html](http://www.aaas.org/spp/dspp/srfl/projects/intres.%20main.Html)

15. Grinyer, A. (2007). “The ethics of Internet usage in health and personal narratives research.” Social Research Update 49, University of Surrey.

16. Hammersley, M. & Traianou, A. (2012). Ethics in qualitative research: Controversies and contexts. Sage.

17. Hewson, C. (2003). “Conducting research on the internet.” *Psychologist-Leicester,* 16(6), 290-3.

18. Hine, C. (2000). Virtual Ethnography. London: Sage.

19 Holt, T. J. & Lampke, E. (2010). “Exploring stolen data markets on-line: Products and market forces.” Criminal Justice Studies, 23, 33–50.

20. Honey, C. & Herring, S. C. (2009). “Beyond microblogging: Conversation and collaboration via Twitter.” In: System Sciences, Jan 2009, HICSS '09, 42nd Hawaii International Conference, IEEE, 1-10.

21. Hookway, N. (2008). Entering the blogosphere': some strategies for using blogs in social research. Qualitative research, 8(1), 91-113.

22. Hudson, J. M. & Bruckman, A. (2004). “‘Go away’: participant objections to being studied and the ethics of chatroom research.” The Information Society, 20(2), 127-39.

23. King, S. A. (1996). “Researching Internet communities: Proposed ethical guidelines for the reporting of results.” The Information Society, 12(2), 119-28.

24. Kitchin, H. A. (2003). “The Tri-Council Policy Statement and research in cyberspace: Research ethics, the Internet, and revising a ‘living document’.” Journal of Academic Ethics, 1(4), 397- 418.

25. Kozinets, R. V. (2002). “The Field Behind the Screen: Using Netnography for Marketing Research in Online Communities.” Journal of Marketing Research, 39, February, 61-72.

26. Kozinets, R. V. (2006). “Netnography 2.0.” In: Belk, R. W. (ed), Handbook of Qualitative Research Methods in Marketing. Cheltenham, UN and Northampton, MA: Edward Elgar Publishing, 129-1.

27. Kozinets, R. V. & Handelman, J. (1998). “Ensouling consumption: a netnographic exploration of the meaning of boycotting behavior.” Advances in consumer research, 25(1), 475-80.

28. Kraut, R., Olson, J., Banaji, M., Bruckman, A., Cohen, J., & Couper, M. (2004). Psychological research online: report of Board of Scientific Affairs' Advisory Group on the Conduct of Research on the Internet. American psychologist, 59(2), 105.

29. Langer, R. & Beckman, S. C. (2005). “Sensitive research topics: netnography revisited.” Qualitative Market Research: An International Journal, 8(2), 189-203.

30. Langford, D. (1996). “Ethics and the Internet: Appropriate behavior in electronic communication.” Ethics & Behavior, 6(2), 91-106.

31. Lomborg, S. (2013). Personal internet archives and ethics. Research Ethics, 9(1), 20-31.

32. Mann, D. & Sutton, M. (1998). “Netcrime: More changes in the organisation of thieving.” British Journal of Criminology, 38, 201–29.

33. Marx, G. T. (1998). “Ethics for the new surveillance.” The Information Society, 14(3), 171-85.

34. McKee, H. A. & Porter, J. E. (2009). The ethics of Internet research: A rhetorical, case-based process (Vol. 59). Peter Lang.

35. Miller, T., Birch, M., Mauthner, M. & Jessop, J. (eds) (2012). Ethics in qualitative research. Sage.

36. Minkler, M., & Wallerstein, N. (Eds.). (2011). Community-based participatory research for health: From process to outcomes. John Wiley & Sons.

37. Nind, M., Wiles, R., Bengry-Howell, A. & Crow, G. (2012). “Methodological innovation and research ethics: forces in tension or forces in harmony?” Qualitative Research, 1468794112455042.

38. Nissenbaum, H. (2011). “A contextual approach to privacy online.” Daedalus, 140(4), 32-48.

39. Paccagnella, L. (1997). “Getting the seats of your pants dirty: Strategies for ethnographic research on virtual communities.” Journal of Computer-Mediated Communication, 3(1), 0-0.

40. Reid, E. (1996). “Informed consent in the study of on-line communities: a reflection on the effects of computer-mediated social research.” The Information Society, 12(2), 169-74.

41. Signorini, A., Segre, A. M. & Polgreen, P. M. (2011). “The use of Twitter to track levels of disease activity and public concern in the US during the influenza A H1N1 pandemic.” PloS one, 6(5), e19467.

42. Smith, H. J., Dinev, T. & Xu, H. (2011). “Information privacy research: an interdisciplinary review.” MIS Quarterly, 35(4), 989-1016.

43. Snee, H. (2013). Making Ethical Decisions in an Online context: Reflections on using blogs to explore narratives of experience. Methodological Innovations Online, 8(2), 52-67.

44. SRA (2003) Social Research Association Ethical Guidelines. Available from:

<http://www.thesra.org.uk/ethical.htm>

45. Staniszewska, S., Herron-Marx, S., & Mockford, C. (2008). Measuring the impact of patient and public involvement: the need for an evidence base. International Journal for Quality in Health Care, 20(6), 373-374.

46. Stone, A.R. (1995). “Sex and death among the disembodied: VR, cyberspace, and the nature of academic discourse.” In: Starr, S. L. (ed), The Cultures of Computing. Oxford: Blackwell, 243-55.

47. Sveningsson, M. (2004). “Ethics in Internet ethnography.” In: Buchanan, E. A. (ed), Virtual research ethics: Issues and controversies. Hershey PA: Information Science Publishing, 45-61.

48. Vieweg, S., Hughes, A. L., Starbird, K. & Palen, L. (2010). “Microblogging during two natural hazards events: what twitter may contribute to situational awareness.” In: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, April, ACM, 1079-88.

49. Wiles, R. (2013) What Are Qualitative Research Ethics. London: Bloomsbury Academic.

50. Wilson, B. & Atkinson, M. (2005). “Rave and straightedge, the virtual and the real: exploring online and offline experiences in Canadian youth subcultures.” Youth & Society, 36(3), 27- 311.

1. <http://ethics.aoir.org/index.php?title=Main_Page> [↑](#footnote-ref-1)
2. <https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2011> [↑](#footnote-ref-2)
3. <http://www.marketingresearch.org/mra-guide-to-the-top-16-social-media-research-questions> [↑](#footnote-ref-3)
4. <http://c.ymcdn.com/sites/www.casro.org/resource/resmgr/docs/social_media_research_guidel.pdf?hhSearchTerms=%22SOCIAL+and+MEDIA+and+GUIDELINES%22> [↑](#footnote-ref-4)
5. <http://www.bps.org.uk/what-we-do/ethics-standards/supplementary-guidance-use-social-media/supplementary-guidance-use-socia> <http://www.britsoccrim.org/codeofethics.htm> [↑](#footnote-ref-5)
6. <http://aoir.org/reports/ethics2.pdf> [↑](#footnote-ref-6)
7. <http://www.britsoccrim.org/codeofethics.htm> [↑](#footnote-ref-7)
8. This is beginning to be understood in the context of the debate surrounding the EU regulation regarding ‘The Right to be Forgotten’ (http://ec.europa.eu/justice/data- protection/files/factsheets/factsheet\_data\_protection\_en.pdf), which seeks to give people the right to request that companies remove embarrassing, inaccurate or personal data from their databases. [↑](#footnote-ref-8)