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Ethical Challenges of Social Media Data: Insights From Academia and Industry

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About Ourselves

- Wasim - Third year PhD student (Faculty Scholarship) in the Health Informatics Research Group. Topic examines infectious disease outbreaks (Swine Flu and Ebola) on Twitter. Forthcoming book chapter on social media ethics (with Peter Bath and Gianluca Demartini).
- Peter - Professor of Health Informatics, Head of Information School and Chair of University of Sheffield Research Ethics Committee (UREC).

Social Media Research

- Involves the analysis of user generated content from social media platforms, e.g., of users, keywords, and hashtags.
- Research may be conducted on platforms with:
 - an **open infrastructure** such as Twitter.
 - **closed systems** such as Facebook, and Tinder.

Social Media Research in Academic Context

- Some institutions may view social media data as being generated by human participants.
- Ethics approval may be needed which details the research project and the level of risk.
- For example, my PhD project required ethics approval before data could be collected.

University of Sheffield approach

- Based on following principles:
 - Social media users are **human participants** if observing them or using their data for research
 - Most social media data are **personally identifiable data** (UK Data Protection Act, 1998).
- New guidance/policy:
 - UREC workshop in Summer 2016
 - Developed by UREC / Dr. Jo Bates
 - **ethical approval** prior to collecting / analysing

Considerations regarding social media data:

- Are the data public or private?
 - E.g., ‘private’ Facebook group vs. use of #hashtag
- Potential for harm from research?
 - Vulnerability of users, sensitivity of topics;
 - Timing of research:
 - Live vs. historical issues; likely to affect behaviour?
 - May affect ability to gain specific ethics approval
 - More complex issues require more careful consideration

Consent, anonymity and privacy

- Obtaining informed consent may not be possible
 - consider users' expectations of privacy
- Observation of public spaces:
 - Privacy statements on web-site;
 - perspectives of gate-keepers
- Ensuring anonymity:
 - Individual users; others mentioned; text.

Social Media Research in Academic Context

- Care placed on protecting participants from harm. Overtime, potentially most UK universities will require researchers to obtain ethics approval.
- When data is analysed things may emerge from the data that may draw attention to groups, individuals, and trends.

Implications of Ethical Approval

- Require researchers to obtain ethics approval before collecting data. May make it difficult to study emerging events.
- Might not be possible to gain consent from all users in a dataset.
- Researchers may need to alter posts when reporting results to prevent people being identified. This may change the meaning of the post.

Other related issues

- Issues over replication if not enough information is provided on how data was collected.
- Different time periods on a similar topic may yield different results.
- Datasets from Twitter cannot be shared, and scraping data from a platform is illegal, but researchers do it anyway.

Industry Research

- May be focused on speed and responding rapidly to events in the first instance.
- May not be as concerned with privacy issues i.e., user-handles may be disclosed.
- User may be targeted for commercial gain, for example, users who tweet they are feeling down may be offered a product to help them feel better.



NatCen Report

- Report by UK National Centre for Social Research - **Research using Social Media; Users' Views.**
- Conducted four focus groups and two paired and two in-depth interviews.
- Findings: Participant's views about research using social media fell into three categories: **scepticism, acceptance and ambiguity.**



NatCen Report

Research using Social Media; Users' Views:

Users were concerned that:

- People behave differently online
- Views may be exaggerated
- Comments may be impulsive
- Profiles may be inaccurate



NatCen Report

- **Research using Social Media;
Users' Views**

Suggestions for improving research practices:

- Sampling and recruitment – be transparent with the purpose and aims of research so more likely to recruit participants ethically



NatCen Report

- **Research using Social Media; Users' Views**

Suggestions for improving research practices:

- Outline how you are going to be collecting or generating data – to improve representativeness of findings.



NatCen Report

- **Research using Social Media;
Users' Views**

Suggestions for improving research practices:

- Taking care in reporting results – for protecting the identify and reputation of participants, e.g., social network analysis.

Social Media Opening up Science?

- There are a number of thriving communities on Twitter for social scientists such as *LSE Impact*, *#PhDChat* and *#NSMNSS*.
- A number of analytics tools to measure the number of engagements and clicks on posts.
- For example, tweet engagements and impressions on Twitter

Monthly Dashboard Analytics

Analytics Home Tweets Audiences Events More ▾

Wasim Ahmed ▾  ▾ Go to Ads



Account home

Wasim Ahmed @was3210

Page updated daily

28 day summary with change over previous period

Tweets

100 ↑69.5%



Tweet impressions

101K ↑91.1%



Profile visits

6,206 ↑71.7%



Mentions

157 ↑190.7%



Followers

15K ↓-280



May 2017 • 12 days so far...

TWEET HIGHLIGHTS

Top Tweet earned 13.8K impressions

Updated for 2017! Using Twitter as a data source: an overview of social media research tools.

[blogs.lse.ac.uk/impactofsocial...](#) #PhDChat #NSMNSS

↩ 6  83  101

View Tweet activity

View all Tweet activity

Top mention earned 100 engagements



Alex Fenton

@alexfenton · May 5

Sports brands & social media-new blog post [alexfenton.co.uk/sports-brands-...](#) #IFB17 @Prof_Chadwick @was3210 @salfordbizsch @DigitalSportUK @richdron

↩ 1  9  11

View Tweet

MAY 2017 SUMMARY

Tweets
27

Profile visits
2,385

New followers
15K

Tweet impressions
30.7K

Mentions
73

Reflections on ethics of researching social media

- ‘A Shared Space and a Space for Sharing’ project
- Analysis of online health forums:
 - Active engagement with host organisations
 - Anonymisation of individuals and posts
 - Editing of posts – avoid de-anonymisation
 - Sharing results with hosts organisations

Conclusions

- Potential of research on social media to develop new understandings of human interactions and behaviour
- Ethical issues require consideration throughout the research process – from design to publication (and after)
- Important considerations include:
 - Potential for harm to individuals
 - Consent, privacy and anonymity of users/groups.
- Policy and guidance available from various



Thank you!

Question s?



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To
Discover
And
Understand.