Literature Review

Learning Development Service
Leonie Maria Tanczer, MSc.
Why
...because most students end up like this:
Who are you?

- Schools / Subjects
- Concerns
- Expectations
- Stage
Workshop Structure

1. The **purpose** of a literature review
2. How to **find** appropriate literature
3. How to **not get** lost in the literature
   - time management, organisation
4. How to **structure** a literature review
   - step-by-step approach
Dissertation
What is a dissertation?

Oxford English Dictionary

• “An extended scholarly essay, [usually] based upon original research, submitted for a degree or other academic qualification.”

More generally:

• A focused ‘essay’, typically about 10,000-20,000 words in length;

• An independent piece of work that demonstrates the candidate’s ability as a competent researcher with advanced knowledge on a specific topic.
Hourglass
Literature Review
Definition

What is a literature review?

• A **critical, analytical account** of the existing research on a particular topic

Why do we write literature reviews?

• Show **knowledge** of the topic
• Keep **current**
• **Stepping stone** to research/further analysis
• Gain **credibility**
The Literature Review...

**IS NOT**

- A descriptive summary of existing literature
- A presentation of your own argument
- Organised by source or written as an annotated bibliography
- An account of every existing piece of research related to your topic

**IS**

- A *critical*, analytical account
- A synthesis of the arguments of *others*
- Organised around ideas or *arguments*
- An account of a *selection* of writings relevant to your work
# 14 Review Types

*(Grant & Booth, 2009)*

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Methods used (SALSA)</th>
</tr>
</thead>
</table>
| Rapid review   | Assessment of what is already known about a policy or practice issue, by using systematic review methods to search and critically appraise existing research.                                                                                                             | Search: Completeness of searching determined by time constraints  

Appraisal: Time-limited formal quality assessment  

Synthesis: Typically narrative and tabular  

Analysis: Quantities of literature and overall quality/direction of effect of literature                                                                                                                                                                                                 |
| Scoping review | Preliminary assessment of potential size and scope of available research literature. Aims to identify nature and extent of research evidence (usually including ongoing research).                                                                                                             | Search: Completeness of searching determined by time/scope constraints. May include research in progress  

Appraisal: No formal quality assessment  

Synthesis: Typically tabular with some narrative commentary  

Analysis: Characteristics quantity and quality of literature, perhaps by study design and other key features. Attempts to specify a viable review of the area. Current state of knowledge and priorities for future investigation and research |
| State-of-the-art review | Tend to address more current matters in contrast to other combined retrospective and current approaches. May offer new perspectives on issue or point out area for further research.                                                                                           | Search: Aims for comprehensive searching of current literature  

Appraisal: No formal quality assessment  

Synthesis: Typically narrative, may have tabular accompaniment  

Analysis: What is known; recommendations for practice. What remains unknown; uncertainty around findings, recommendations for future research.看待现存研究的可能进一步发展和研究领域。 |
| Systematic review | Seeks to systematically search for, appraise and synthesis research evidence, often adhering to guidelines on the conduct of a review.                                                                                                                           | Search: Aims for exhaustive, comprehensive searching  

Appraisal: Quality assessment may determine inclusion/exclusion  

Synthesis: Typically narrative with tabular accompaniment  

Analysis: What is known; recommendations for practice. What remains unknown; uncertainty around findings, recommendations for future research.看待现存研究的可能进一步发展和研究领域。 |
| Systematic search and review | Combines strengths of critical review with a comprehensive search process. Typically addresses broad questions to produce 'best evidence synthesis'.                                                                                                         | Search: Aims for exhaustive, comprehensive searching  

Appraisal: May or may not include quality assessment  

Synthesis: Minimal narrative, tabular summary of studies  

Analysis: What is known; recommendations for practice. What remains unknown; uncertainty around findings; limitations of methodology |
| Systematized review | Attempt to include elements of systematic review process while stopping short of systematic review. Typically conducted as postgraduate student assignment.                                                                                                          | Search: May or may not include comprehensive searching  

Appraisal: May or may not include quality assessment  

Synthesis: Typically narrative with tabular accompaniment  

Analysis: What is known; uncertainty around findings; limitations of methodology |
| Umbrella review | Specifically refers to review compiling evidence from multiple reviews into one accessible and usable document. Focuses on broad condition or problem for which there are competing interventions and highlights reviews that address those interventions and their results.                 | Search: Identification of component reviews, but no search for primary studies  

Appraisal: Quality assessment of studies within component reviews and/or of reviews themselves  

Synthesis: Graphical and tabular with narrative commentary  

Analysis: What is known; recommendations for practice. What remains unknown; recommendations for future research |
Purpose
What is the aim?

- To provide an **organised overview** of existing research on a specific topic
- To take a **critical and evaluative perspective** toward published research
- To **summarise, synthesise and analyse** the arguments of other authors
- To **uncover similarities and differences** or consistencies and inconsistencies within existing research
- To identify a **gap** within the body of research
- To help you generate and justify your **research question and hypotheses**
Be Original. Find a Gap.

• Value of a research lies in its contribution to knowledge

• Should strive to show clearly how the previous research is conflicting or lacking in some way

• This lack is called a “gap” – your research contributes to “fill” the gap.

• Gap should flow naturally and clearly from your understanding of the literature
The Gap. The Rationale.

• Ask yourself:
  – Why is the gap you’ve identified important?
  – How important is the gap you’ve identified?
  – Why is it worth to investigate this particular gap?
  – What is the benefit from studying that gap respectively research area further?

• You will need to make a persuasive argument for the importance of this issue as it provides the rational for your research
Five Types of Gaps

- **Knowledge-based**: Most common, occurs when we don’t know (enough) about a phenomenon
- **Relationship-based**: occurs when we know about certain issues or variables well, but are unsure about their relationship
- **Theory-based**: occurs when a theory or an aspect of a theory has not been investigated thoroughly, or not been tested in a particular way
- **Methodological**: occurs when a research design or methodology has not been applied to a particular phenomenon
- **Analytical**: occurs when a phenomenon has not been investigated using a particular analytical approach i.e., qualitative vs. quantitative
Activity

• Write down a key term which summarises the research field or theme you are going to work in/with?
  – Hacktivism

• What do you want to achieve with your work? – What is your research question? Hypotheses?
  – Break gender stereotypes of the “white male hacker”
  – What characterises the discourse of hacktivists around gender?

• What are related topics, research areas, keywords or issues?
  – Gender Studies, Computer Science, Gender Stereotypes

• What theory/theories is/are underpinning your research?
  – Social Identity Theory
Activity

• What methods / arguments are common in this research area?
  – Quantitative Analyses: Implicit Association Test etc.
  – Qualitative Analyses: Semi-Structured interviews, focus groups etc. – Discourse Analyses etc.

• What is the purpose of your literature review? What is missing?
  – To lead to the gap = no research which investigates the “male-only” stereotype of the hacktivist community

• Get stuck?
  – What do you already know?
  – What information do you still need?
Find Literature
Resources

• Yes, there are **more resources than just books**!

• **Search for sources:**
  – Use your **key words**
  – **Timeframe** (how recent should sources be?)
  – **Types** of sources (e.g. books, peer-reviewed journals, newspapers and magazines, conference papers, government publications, artwork, publishers’ websites, online discussions)
  – Begin searching more **creatively** and narrow as you go
  – Library Support
How can your subject librarian help?

• Advise on using library services
  – ILL’s (inter-library loans)
  – Recommending material

• Advise on how to best use library resources
  – Accessing e-journals
  – Keeping up to date with what is being published (Zetoc)
  – How best to search for the literature
  – Managing your references (Refworks)
Welcome to LibGuides

Research assistance, subject guides, and useful resources compiled by your friendly librarians at the Library at Queen's. Know what we know - find it in LibGuides!

Subjects

- Anthropology by Eimear Bleee
- Biological Sciences by Paula Younger
- Chemistry & Chemical Engineering by Janet Drake
- Creative Arts by Isabel O'Kelly
- Education by Norma Menabney
- Electrical Engineering & Computer Science by Dan Holden
- English by Eimear Bleee
- Geography, Archaeology & Palaeoecology by Carol Dunlop
- History by Eimear Bleee
- Law by Diarmuid Kennedy
- Management by Norma Menabney
- Mathematics & Physics by Carol Dunlop
- Mechanical & Aerospace Engineering by Janet Drake
- Medicine, Dentistry & Biomedical Sciences by Richard Falls
- Midwifery by Patricia Watt
- Modern Languages by Isabel O'Kelly
- Nursing (Continuing professional, academic development and research) by Patricia Watt
- Nursing (Undergraduate level) by Brenda Allen
- Pharmacy by Paula Younger
- Planning, Architecture & Civil Engineering by Janet Drake
- Political Science by Eimear Bleee
- Sociology, Social Policy & Social Work by Norma Menabney
- Theology by Eimear Bleee
Ejournals

All the Library’s ejournals are included in QCat Discover but the major journals packages for SPACE are:
- ASCE Research Library
  Full-text journals and conference proceedings from the American Society of Civil Engineers.
- ICE Virtual Library
  Full-text access to publications from the Institution of Civil Engineers.
- JSTOR
  Full-text access to over 1,000 academic journals as well as books and other materials.
- ScienceDirect
  Full-text access to over 2,500 peer-reviewed journals and chapter summaries from over 11,000 books.
- Structural Engineer
  Full-text access to the complete run of The Structural Engineer from 1923 to the present.

Databases

If you just need to do a quick search for a few journal articles, use the QCat Discover box below or one of the e-journal packages on the left. They will deliver the full-text immediately.

For a more comprehensive search for journal articles and conference papers, use the databases because they have far wider coverage and lots more search options.

Some of the databases contain full-text documents but, for those which don’t, you will need to use the QConnect service to link from the database to the full-text elsewhere on the web. The databases cover many more items than are available from the Library but if you find something you cannot access, it can be requested via the Inter-Library Loans service.

- ABI/INFORM Global (FULL TEXT)
- Avery Index to Architectural Periodicals
- Business Source Premier (FULL TEXT)
- Compendex Backfile 1884-1969
- Construction Information Service (FULL TEXT)
- International bibliography of the social sciences
- JSTOR
- PADDI
- RIBA British Architectural Library Catalogue
- RUDI Resource for Urban Design Information
- Scopus
- Specify-it (FULL TEXT)
- Steelbiz (FULL TEXT)
- Web of Science

Newspapers

- Nexis UK
  Full-text articles from a wide range of local, national and international newspapers such as the Belfast Telegraph, Irish Times, Guardian, Independent and New York Times.
- Irish Newspaper Archives
  The world’s largest online database of Irish newspapers.
- Irish Times
  The digital archive of the Irish Times contains exact reproductions of all articles published in the paper from 1859 onwards while the text archive has all material published on irishtimes.com from 1996.
- 19th Century British Library Newspapers
  Contains full runs of 48 influential national and regional newspapers representing different political and cultural sections of 19th century British society.
Search for Literature: Tips

• Examine reference lists closely
• Look for key authors
  – Go onto their homepage / profile and investigate their publications carefully
• Search for articles within significant journals instead of relying solely on databases
• Use the keywords in your research question to find suitable literature
• Google Scholar can be very helpful
Gathering Research for your Dissertation

In most subject fields at Queen's you will be asked to complete a dissertation. While writing the dissertation can be a challenge in itself, so can gathering the resources needed to answer your stated research question.

Try some of the following tips for collecting research material together:

- **Refer back to your module guide:** Your module guide is full of useful readings and resources. Generally they are neatly organised under topic headings. Your module convenor will have spent a significant amount of time in selecting relevant material for each topic and will have provided you with both *essential* and *desirable* readings. Whereas you wouldn't normally be expected to consider all of this reading in advance of a weekly tutorial, you should become familiar with this content if it is relevant to your dissertation research.

- **Identify the key words in the dissertation topic:** Deconstruct the dissertation title and highlight each of the key words. This is important as the key words will help to inform your background research and will be used when gathering reading material and other resources. Ask yourself, do you fully understand the question and/or the dissertation topic? Often students struggle to begin their research because they aren’t sure of the task at hand. Don’t be afraid to approach your module tutor for clarity. In addition, feel free to meet with your peers and discuss your proposed dissertation topic.

- **Visit the Library:** Depending on your discipline, the library will be your first port of call. The various library facilities (McClay, Medical & HSC, and Biomedical Library) are well equipped to support your research needs. Don’t forget to visit the Learning Commons for additional resources.
Don’t get lost
Read & Record

• Read strategically!
  – Highlight i.e., notes in margins
  – Reflect i.e., note taking sheets
  – Store i.e., store source info

• Read critically!
  – First read
    • Skim abstract i.e., focus on your needs
    • Identify essential parts i.e., methods, findings, sample etc.
  – Dig Deeper
    • Evaluate the text i.e., strengths, invalid assumptions, contradictions etc.
  – Digging Deeper
    • Compare and contrast the source with previous readings i.e., agreements, disagreements, does author acknowledge or neglect the work of others
Critical Reading = Critical Writing

• It is not about thinking negatively or about finding fault in everything you read, write or do.

• It is about analysing the information you are receiving, putting it into context and using it to come to a logical conclusion.
How to organise your resources?

• Before you begin reading, decide how you will track bibliographic information
  – E.g. Refworks, Zotero

• How will you record important points and ideas that you are gathering
  – E.g., digital document, notes sheets

• How will you organise sources
  – E.g., printed or electronically
<table>
<thead>
<tr>
<th>Important points, notes, quotations</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connections to other author(s) or source(s):</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author(s)/Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
</tr>
<tr>
<td>Web-site</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Publisher or Journal</td>
</tr>
<tr>
<td>Volume</td>
</tr>
<tr>
<td>Author's position/theoretical position</td>
</tr>
<tr>
<td>Essential background information</td>
</tr>
<tr>
<td>Overall argument or hypothesis</td>
</tr>
<tr>
<td>Conclusion</td>
</tr>
<tr>
<td>Supporting reasons</td>
</tr>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
</tr>
<tr>
<td>Strengths of the line of reasoning and supporting evidence</td>
</tr>
<tr>
<td>Flaws in the argument and gaps or other weaknesses in the argument and supporting evidence</td>
</tr>
</tbody>
</table>
## Research Document Notes

(Using Excel)

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Location/Key words</th>
<th>Title/Notes</th>
</tr>
</thead>
</table>
| Dwyer, Carol    | 1998 | Formative Assessment, teacher training, UK | Assessment and Classroom Learning: theory and practice  
- Reaction to Black and Wiliam  
- How you support and train teachers  
- UK teachers no assessment training  
- Assessment barriers |
| Anderson, Jill  | 2008 | NCLB Critique, US                | Experts Analyze NCLB at Askwith Education Forum  
- NCLB not working  
- NCLB up for reauthorization  
- Accountability itself is not solution to decreasing achievement gap!  
- Statement at Boldapproach.org  
- Problem with NCLB accountability is looks only at one thing out of many functions of schools  
- Suggests different accountability system  
- Problem is poverty |
Self-discipline

- **Motivation**: what’s at stake?
- **Energy levels** i.e., morning person or night owl?
- Dealing with **feedback and criticism**
- Making **changes**: adapting the proposal
- Coping with the **unpredictable**
- Knowing when (and who) to **ask for help**
- Keeping **control** of your project:
  - word-limit(s)
  - timescale
  - plans for future research
Time Management

• Time management means taking more control over how we spend our time and making sensible decisions about the way we use it.

• Difficulties:
  – Procrastination
  – Perfectionism
  – Motivation
  – Time thieves
Time Management

• Use a **timetables**:
  – **daily to-do-lists**: list what you plan for each study session; tick off what you cover
    • Macro-Management:
    • Micro-Management:
  – **weekly planners**: decide what needs to be done over the course of a week; assign slots
  – **wall chart**: get a broader picture of the time available
Time Management: Tips

• Keep a diary in format that works for you
• Use backward mapping
• Set specific tasks to accomplish in bite-sized chunks
• Control interruptions/distractions
• Use marginal time wisely
• Prioritise tasks – categorise tasks which you must complete over the next week
• Leave time free for the unexpected as you can always use it
Time Management: Tips

• Avoid perfectionism
• Concentrate on being effective, not on being busy
• Avoid lots of time thieves
• Don’t do the work of others
• Do it now!
• Give realistic promises
• Learn to say “No”
Productivity

Try the Pomodoro Technique

1. Select a task to be accomplished
2. Set the Pomodoro to 25 minutes (the Pomodoro is the timer)
3. Work on the task until the timer rings (then put a check on your sheet of paper to mark where you reached in the time)
4. Take a short break (around five minutes)
5. Every four Pomodoros take a longer break (up to an hour)
Two Golden Hours
(Gardiner & Kearns, 2010)

These things are not allowed:

• Editing
• Formatting
• Surfing online
• Emailing
• Referencing
• Photocopying
Store. Safe!

• **Back up your work**
  – Q:Drive, Memory Pen, *Dropbox*, external hard drive, laptop/desktop, email attachments
  – take all measures to avoid that emergency situation

• **Reference & make footnotes as you go**
  – It will make your life so much easier e.g., use *Refworks*

• **Which of your documents is the most recent?**
  • Start an appropriate system e.g., 1 Dissertation 12.06.2014
Structure
What you have done so far...

1. Refined your topic i.e., angle you anticipate your writing will take
2. Organizational planning i.e., how to safe papers and record information
3. Searched for sources i.e., through LibGuides, QCat etc.
4. Read and recorded i.e., you have a summary of all the content of the publications
5. Now you need..
Reflect and organise on your sources

• **Review the information** (build sample overarching claims / assertions; develop storyline):
  – Mind mapping
  – Free writing
  – **Bullet points**
  – Organisational Charts (e.g., Microsoft Visio)
  – Notes organised by source
  – Notes organised by theme
  – Notes organised chronologically
Activity

• Fill in the **mind map**
  – Which issues would you like to address?

This is an example of a mind map you can use as a reference when creating your own.
Outline possible structure

• A literature review should have an **introduction**, **main body and conclusion**

• Main body organised by **headings and subheadings** informed by your readings

• Your paper begins to take shape as you organise the information under each

• Be as **detailed** as possible
What to cover?

• **Problem / Key issue** which justifies your research
• **Background Information** i.e., historical, political, cultural or scholarly
• **Definitions** of key words, concepts, topics etc.
• **Theoretical Foundations**
• **Related** studies, experiments or findings
• **Current** practice or issues
• **Various arguments and viewpoints** surrounding the issue
Structure: Introduction

• Mention the problem(s)
• Provide an appropriate context for reviewing the literature i.e., currently highly discussed in the news
• Define your topic and key areas of research within it
• Outline the organisation and state the scope of the review - i.e. what is included and what isn’t included.
• Explain the value of this research field (your project)
HACKTIVISM AND STEREOTYPES

News coverage is currently replete with stories on hacking. Hackers are often depicted as criminals and the hacker community perceived as homogeneous (McLaurin, 2011; Taylor, 2005). Associations of hackers are thereby narrowed down to certain social categories (Sauter, 2012). Reports on LulzSec member Jeremy Hammond, or the former technical contractor of the National Security Agency (NSA) Edward Snowden, lead to the perception of all hackers being young, white, middle class males. Although all these characteristics are worth an investigation, the present research will put an emphasis on the male-only stereotype of this dominant portrayal (Taylor, 2003). Moreover, it will focus exclusively on politically motivated hackers, so-called hacktivists (Jordan, 2002).

Hacktivism is a relatively new, innovative form of activism. It is utilising technology and the internet for political means (Ilha, 2003; Taylor, 2005). Due to the current worldwide attention towards hacktivists, and especially the latest popularity of the hacktivist collectives Anonymous (Norton, 2011; Olson, 2012) and LulzSec (Halliday, Arthur, & Ball, 2011) this investigation is more than necessary. Although the gender imbalance is also prevalent in the general hacker community (Keller, 1991), the hacktivist scene, due to its social and political motivation, seems opportune for a gender-centred analysis. Thus, the present research focuses on a striking underrepresentation of female hacktivists within both the hacktivist community, as well as the existing body of literature about and media portrayal of this new form of activism.

The male-only stereotype excludes women from that field, reproduces and enhances gender bias, while it simultaneously ignores female contributions. This exclusion of women in the hacktivist community is illustrative of the general suppression of females and gender issues in many spheres of society (Coffee, 2013; Littrell & Bertsch, 2013). The research therefore seeks to identify how this male-only stereotype affects both male and female self-defined hacktivists discursively in their talk and sense-making, using a qualitative approach. A more detailed review of the relevant literature is going to be outlined in the following sections, before ending with a summary of the aim of the current research.

**Terminological Delineation of Hacktivism**

Hacktivism is a conflation of hacking and activism (Denning, 2001). The term hacking is understood in relation to computer hacking (Kelly, 2012), which can be considered as activities ranging from gaining unauthorized access to systems or data (Cresswell, 2010) to manipulating technology for unorthodox means (Turkle, 1984). Hacktivists therefore use the same tools and techniques as hackers, but do so in order to bring attention to larger, political or social goals (Milone, 2002). The term activism comprises actions taken to promote change
Structure: Main Body

• Contains your discussion of sources which lead to the gap
  – ‘Bloggs argues...’ ‘Jones highlights...’

• Organised by headings and subheadings informed by your readings

• Your paper begins to take shape as you organise the information under each heading

• Move from a general, wider view of the literature being reviewed to the specific focus of your research
Structure: Main Body

- **Chronological method**: order your sources by publication chronology - only if the order demonstrates a more important trend
- **Thematic review**: reviews of literature are organized around a topic or issue. Progression of time may also be an important factor
- **Methodological approach**: focuses on the “methods” of the researcher or writer
- A **combination** approach?
Paragraphs

• Write in full sentences that flow and link
• These should be grouped together in paragraphs
• Paragraphs give your writing structure
  – They cover one main idea
  – They are several sentences long
  – They are formatted consistently
  – They have an internal structure of an introduction, main body and conclusion (i.e., opening topic sentence, supporting sentences, concluding sentence)
Signposted

- Difference between your arguments and examples given
- Links between sentences to do with same point
- Links between paragraphs in same section of essay
- How sections lead to a conclusion or answer
- Enables that paragraphs or sentence are not independent arguments – helps create an “overall picture”
Signposted

- **To add more ideas:** again, furthermore, in addition, moreover
- **To compare or contrast ideas:** alternatively, contrastingly, conversely, whereas
- **To prove something:** evidently, for this reason, because, inevitably
- **To show exceptions:** however, nevertheless, yet, in spite of
- **To repeat or refer back to something:** as has been mentioned/noted.../ as previously discussed
- **To show that you will include something later:** this will be discussed in detail later
- **To emphasise something:** definitely, obviously, inevitably, undeniably
- **To give an example:** for instance, in this case, in particular, notably
- **To show the order of things:** previously, following this, initially, subsequently, finally
- **To conclude:** to summarise, in conclusion, consequently, as has been shown
Hacktivism and Stereotypes

Social Psychological Perspectives on Online Collective Action

According to Drury (2002), collective action is the site of construction of new discourses, identities, and social relations. Collective action itself is defined as any action that is directed at improving a state of disadvantage of a group as a whole (Wright, Taylor, & Moghaddam, 1990). It can be performed by collectives and/or individuals, acting in representation of an ingroup or outgroup (Van Zomeren & Iyer, 2009). When referring to online collective action these actions are conducted through information and communication technologies (ICT) such as the internet (Postmes, 2007). Van Laer (2010) identified that the internet (a) facilitates and supports traditional offline collective action, and (b) creates new modes of online collective action, such as hacktivism.

One of the assumptions of the social identity model of deindividuation effects (SIDE) (Postmes, Spears, & Lea, 1998; Postmes & Brunsing, 2002) is that anonymity online is utilised to resist more powerful majority groups. Hence, there is an ability to express social identities by reducing the accountability of users due to the anonymity. This enables members of less powerful groups to express views for which they might otherwise be punished. These groups may benefit from the liberty offered by the medium (Postmes & Brunsing, 2002). Therefore, mobilisation of traditionally excluded or underrepresented groups and individuals is enhanced through online collective action, such as hacktivism (Janssen & Bodemer, 2013). However, literature is inconsistent on this empowering aspect of online collective action (Dahlgren, 2005). Not only is the alleged anonymity online in doubt (Kucukyilmaz, Cambazoglu, Aykanat, & Can, 2008), but Kahn & Kelner (2004) also critically reason that these new forms of online collective action involve new modes of fetishism and domination.

Due to these inconsistencies, Van Laer (2007) argues that the internet does have empowerment potential, but with regard to existing inequalities within society. This is applicable for hacktivism, as it implies elitism in the sense that not everyone has the technical skills to conduct this form of activism. Moreover, Van Laer’s (2007) argument seems reasonable from a gender perspective, considering that females express significantly more cautious opinions than males towards technology, and studies on computer anxiety and computer self-efficacy reveal a gender gap to the disadvantage of women (Dundell & Haag, 2002; McIlroy, Bunting, Tierney, & Gordon, 2001; Todman & Day, 2006). It is therefore that the male-only stereotype needs specific investigation.

Social Psychological Perspectives on Stereotypes

The process of stereotyping is the heuristic encoding, storage, retrieval, and processing of information to make sense of one’s social world (Berkowitz & Devine, 1995; Tversky & Kahneman, 1973). It is the social categorisation or classification of people into groups based on common prototypical attributes through cognitive association. Brown (2010) defines a stereotype therefore as a perception of a characteristic that most members of a category share. Differences amongst outgroup members are blurred and a perceived entity is given. This
Top Tip! Find a Model Review.

• Look for other literature reviews in your area of interest/ your discipline

• Read them to get a sense of the types of themes you might want to look for in your own research or ways to organize your final review

• To do this: simply put the word “review” in your search engine along with your other topic terms to find articles of this type on the Internet or in an electronic database
Structure: Conclusion

• identify significant **flaws or gaps** in existing knowledge

• summarise the important analysis of the **existing body of literature** to evaluate it (avoid direct reference to authors)

• state your **argument/research question**

• **link your research** to this existing knowledge
women. Similarly, Gilboa (1996) identifies a gender gap, while Keller (1991) goes even so far speaking about machismo in the hacker community. It is therefore not surprising that Thomas (2003) refers to “hacking as a boy culture” (p. xvi, Introduction), and this idea is, due to the close linking of these two communities, according to Taylor (2005), transferable to the hacktivist scene.

**The Present Research**

The present research fills the gaps in the methodologically loose literature on hacktivism and expands it, as it is currently limited to technical and legal aspects of hacktivism (Eriksson & Giacomello, 2006; Kelsey, 2008). It provides the first discourse analysis on this community and builds on existing research on gender stereotypes and gender imbalances in technology. The study looks at the discursive construction of this stereotype through language, as discourses play an important role in the maintenance, application, and change of stereotypical perceptions. Hence, drawing on the public male-only stereotype, the guiding research question is: What characterises the discourse of politically motivated hackers in regard to gender?

Building on the SIA (Reicher et al., 2010), the discourse of politically motivated hackers as part of their own perception and self-categorisation as hacktivists is analysed. A social psychological perspective is adapted to analyse how male and female hacktivists approach this stereotype in their talk and sense-making. Especially the self-categorisation of females towards the social and political hacktivist-identity, despite its male-only stereotype, is going to be evaluated. Based on this theoretical underpinning and the social psychological research on online collective action and stereotypes, the research aims to demonstrate (a) that societal gender stereotypes about hacktivists are existent within the community, (b) how hacktivists relate to this dominant representation, and (c) whether societal stereotypes about the male-only perception of hacktivists affect their own talk and sense-making.

**Method**

**Participants and Sampling**

A gender-equal, self-selected sample of $N = 10$ hacktivists ($n = 5$ females, $n = 5$ males), all of whom self-identified as hacktivists, were interviewed. The researcher enlisted participants through a recruitment email that was sent to (a) IT-related mailing lists known by the researcher, (b) Web 2.0 presence of hacktivists and hacktivist collectives, and (c) personal
Activity

• Fill in the **bullet points**
  – Which issues have to be mentioned when and why (i.e., order)?

INTRODUCTION:
1. **Problem / key issue which justifies your research**

2. **Background information i.e., historical, political, cultural or scholarly & terminology**
Write, revise, write, revise

• Is it telling the right story in a logical way?

• Use evidence: your interpretation of the available sources must be backed up with evidence to show that what you are saying is valid

• Summarize and synthesize your sources: select only the most important points in each source to highlight in the review
Write, revise, write, revise

• **Use quotes sparingly** - the survey nature of the literature review does not allow for in-depth discussion or detailed quotes from the text.

• Some short quotations can be used to **emphasize** a point, or if it cannot be rewritten

• Use caution when paraphrasing: be sure to **represent the author’s information** or opinions **accurately** and in your own words
Write, revise, write, revise

• Keep your own voice: weave references to other sources into text, but maintain own voice

• However: Your main objective is to present the material, not the argument

• Spend time revising the review

• Rewrite or rework the language of your review to make it as concise as possible

• Use terminology familiar to your audience; get rid of unnecessary jargon or slang
Academic Writing Style: General

- Formal
- Clear
- Impersonal
- Cautious
- Objective
- Concise
- Confident
- Follows conventions e.g. avoids contractions

- Employs specialist vocabulary
- Structured
- Uses continuous prose with paragraphs
- Signposted
- Edited and proof read
- Critical writing style
- Referenced
Academic Writing Style: General

- Formal
- Clear
- Impersonal
- Cautious
- Objective
- Concise
- Confident
- Follows conventions e.g. avoids contractions

- Employs specialist vocabulary
- Structured
- Uses continuous prose with paragraphs
- Signposted
- Edited and proof read
- Critical writing style
- Referenced
Writing Style: Considerations

- **Academic**: Neutral, specific, objective, impersonal, generic, formal, no contractions i.e., is not / isn’t,
- **Non-Discriminatory**: Think before you write
- **Non-Sexist**: Gender-neutral language
- **Coherence**: flow, link, signpost, clearly and concisely
- **Cite**: Reference and Paraphrase
- **Footnotes**: Use when appropriate

**Tip!** Read papers in your research area and adopt their writing style!
Writing Style “Bible”
Welcome to RefWorks!

Want to learn how to get the most out of RefWorks?

Check out our great series of videos to see what's new with RefWorks and learn how to quickly navigate through the basic features. Or, participate in one of our free webinars. For a list of our current scheduled training sessions, please click here. Download our Quick Start Guide and you'll be using RefWorks in no time!

Learn about Flow, the latest creation from the RefWorks team.

Ready to take your research to the next level? Try Flow, our super-intuitive, cloud-based collaborative document and citation manager. Flow manages and displays your full text PDFs, auto-completing their metadata so you don't have to. You can read and annotate the text right in your browser, then cite your references with Flow for Word. Collaboration is a cinch, too. Flow lets you share your work and co-create shared collections with classmates, colleagues, or students, then annotate them together. Importing your research from RefWorks takes a single click.

Learn more about Flow.

Want to keep up with the latest on RefWorks or learn more about the full-text management and collaboration to Flow?

Like us on Facebook, follow us on Twitter, or read our blog. That way, you'll be the first to hear about new features, get help from our excellent support team - even be invited to participate in special events.

Connect with RefWorks now!
Questions?
We can help you develop your academic skills.

Workshops / Resources

Contact us:
028 9097 3618
lds@qub.ac.uk
www.qub.ac.uk/lds