Human-Computer Interaction Class Code: BSCS-F2015A

Tariq Zaman Ph.D.

CECOS University of I.T. & Emerging Sciences F-5, Phase-VI, Hayatabad, Peshawar



Literature Review

Tariq Zaman

What?

- What is "Literature"?
- Scholarly articles, books and other sources (e.g. dissertations, conference proceedings) relevant to a particular issue, area of research, or theory, providing a description, summary, and critical evaluation of each work.
- What is a Literature Review?
- An account of what has been published on a topic by accredited scholars and researchers.
- An evaluative report of information found in the literature related to your selected area of study.
- Summary, classification, and comparison of prior research studies, reviews of literature, and theoretical articles

Why do researchers need to conduct literature reviews?

- To develop an overview of significant literature published on a topic.
- To prepare part of the introduction to an essay, research report, or thesis.
- To convey to your reader what knowledge and ideas
 have been established on a topic, and what their
 strengths and weaknesses are
- To enable you to gain and demonstrate skills in two areas;
 - information seeking: the ability to scan the literature efficiently, using manual or computerized methods, to identify a set of useful articles and books
 - critical appraisal: the ability to apply principles of analysis to identify unbiased and valid studies

What does a literature review do?

- Enlarging your knowledge about the topic
- Identify gaps in the literature
- Identify areas of controversy and disagreement
- Formulate questions that need further research
- Synthesize the results into a summary of what is known and what is not known
- Identify and describe existing theories in the field
- Narrow down your field of enquiry towards a doable research study
- Justify your project

What should a literature review contain?

- An overview of the subject, issue or theory under consideration, along with the objectives of the literature review
- Division of works under review into categories (e.g. those in support of a particular position, those against, and those offering alternative theses entirely)
- Explanation of how each work is Similar to and how it Varies from the others
- Conclusions as to which pieces are best considered in their argument, are most convincing of their opinions, and make the greatest contribution to the understanding and development of their area of research

How to conduct a literature review

- 1. Problem formulation which topic or field is being examined and what are its component issues?
- Literature search finding materials relevant to the subject being explored.
- 3. Data evaluation determining which literature makes a significant contribution to the understanding of the topic.
- Analysis and interpretation discussing the findings and conclusions of pertinent literature.

How to conduct a literature review

- Familiarize yourself with the scholarly journal literature by browsing the Library's journals lists.
- Identify the keywords and phrases that describe your topic by making a list of possible synonyms.
- Select and search appropriate databases or search tools, for example:
 - Academic Search Premier (Multidisciplinary)
 - IEEE Xplore Digital Library
 - ACM Digital Library
 - Google Scholar
 - Social Sciences Citation Index (Citation tracking)

How to write a literature review

- The format of a review of literature may vary from discipline to discipline and from assignment to assignment.
- Write it as a piece of discursive prose (proceeding by reasoning or argument rather than intuition) not a list describing or summarizing one piece of literature after another.
- Organize the review into sections that present themes or identify trends and relevant theories.
- Don't start every paragraph with the name of a researcher.
- Do not list all the material published, but synthesize and evaluate it according to the guiding concept of your thesis or research question.

Writing the introduction

- Define or identify the general topic, issue, or area of concern, thus providing an appropriate context for reviewing the literature.
- Point out overall trends in what has been published about the topic; or conflicts in theory, methodology, evidence, and conclusions; or gaps in research and scholarship; or a single problem or new perspective of immediate interest.
- Establish the writer's reason (point of view) for reviewing the literature; explain the criteria to be used in analyzing and comparing literature and the organization of the review (sequence); and, when necessary, state why certain literature is or is not included (scope).

Writing the body

- Group research studies and other types of literature (reviews, theoretical articles, case studies, etc.) according to common denominators such as qualitative versus quantitative approaches, conclusions of authors, specific purpose or objective, chronology, etc.
- Summarize individual studies or articles with as much or as little detail as each merits according to its comparative importance in the literature,.
- Provide the reader with brief "so what" summary sentences at intermediate points in the review to aid in understanding comparisons and analyses.

Writing the conclusion

- Summarize major contributions of significant studies and articles to the body of knowledge under review, maintaining the focus established in the introduction.
- Evaluate the current "state of the art" for the body of knowledge reviewed, pointing out major methodological flaws or gaps in research, inconsistencies in theory and findings, and areas or issues pertinent to future study.
- Conclude by providing some insight into the relationship between the central topic of the literature review and a larger area of study such as a discipline, a scientific endeavor, or a profession.

Ask yourself:

- What is the specific thesis, problem, or research question that my literature review helps to define?
- What type of literature review am I conducting? Am I looking at issues of theory? methodology? policy? quantitative research? qualitative research?
- What is the scope of my literature review? What types of publications am I using (e.g., journals, books, government documents, popular media)? What discipline am I working in (e.g., nursing psychology, sociology, medicine)?
- How good was my information seeking? Has my search been wide enough to ensure I've found all the relevant material? Has it been narrow enough to exclude irrelevant material? Is the number of sources I've used appropriate for the length of my paper?
- Have I critically analysed the literature I use? Do I follow through a set of concepts and questions, comparing items to each other in the ways they deal with them?
 Instead of just listing and summarizing items, do I assess them, discussing strengths and weaknesses?
- Have I cited and discussed studies contrary to my perspective?
- Will the reader find my literature review relevant, appropriate, and useful?

Assessing the literature to examine:

- Provenance— What are the author's credentials? Are the author's arguments supported by evidence (e.g. primary historical material, case studies, narratives, statistics, recent scientific findings)?
- Objectivity— Is the author's perspective even-handed or prejudicial? Is contrary data considered or is certain pertinent information ignored to prove the author's point?
- Persuasiveness Which of the author's theses are most/ least convincing?
- Value Are the author's arguments and conclusions convincing? Does the work ultimately contribute in any significant way to an understanding of the subject?

Tip; collecting literature

Documents library

Literature

- 🕌 Journal of International Developmen...
- Bridging research and policy in Inter...
- Creating Space for Engagement
- DFIDR4DProjectRecord6042220130311
- Gitau et al ICTD Research by African...
- Heeks Compendium on Impact Asse...
- Heeks Theorizing ICT4D Research
- Impact 20 New mechanisms for lin...
- Is Development Research Coming of...
- Knowledge, policy and power in inte...
- ODI Making a Difference M&E of p...
- Organizational Factors that Influenc...
- organizacional raccors chac innacric.
- Radio, ICT Convergence and Knowle...
- Research for Policys Sake The Emlig...
- Should aid donors support economi...
- Summary old
- The disciplining effects of impact ev...

- Approaches to Development Resear...
- Capacity issue 35 Dec 2008 Research ...
- Deliberation, Dialogue and Debate
- Does Research Reduce Poverty Asses...
- **■** Gomez The Quest for Intangibles
- Heeks D0 ICTS Contribute to Develo...
- Heeks_J.Int.Dev_22
- Impact 20 New mechanisms for lin...
- Issues in assessing the policy influen...
- Learning lessons on research comm...
- ODI Bridging Research and Policy in ...
- Out of the Loop Why Research Rarel...
- Rapid knowledge 'Bridging research ...
- science-into-policy nerc
- Social development as knowledge b...
- Summary 🖳
- Tools for Policy Impact A Handbook...

- Are southern academics virtually co...
- Communication of Research for Pov...
- Developing a strategy for knowledge...
- Donner Persistent themes in ICT4D R...
- Harris Impact of Research on Develo...
- Heeks ICT4D2
- Helena_Grunfeld
- Impact of economic policy research
- Kleine ICT4 What
- Making Science of Influencing Asses...
- Online Consultation and Political
- Pather A Strategy for Evaluating Soci...
- Redefining the Researcher, and the R...
- Sen Literature Review on Rates of Re...
- Stimulating Demand for Research Ev...
- Summary1
- Understanding Networks The Functi...

- Bridging Research and Policy An An...
- Constituting the academic performe...
- DFID HtN_-_Strength_of_Evidence
- Final Report, Impact Evaluaiton
- Hedström The Quest for Development
- Heeks Theorising ICT4DE Research
- ICT INFRASTRUCTURE IN EMERGIN...
- Improving the impact of developme...
- KNOWLEDGE TO POLICY making th...
- Necessary but not sufficient
- Opportunities, Challenges and Good...
- R4D Social Media Engagement Repo...
- References
- Sey Literature Review on the Impact ...
- STRENGTHENING RURAL LIVELIHO...
- Summary2
- WB THE ART OF knowledge exchange

Tip; summarising literature

[mpact of Research on Development Policy and Practice: Literature Review By Roger Harris

Publication	Abstract	No. and the
		Key points
Approaches to Development Research Communication Tessa Lewin and Zachary Patterson. IDS Bulletin Volume 43 Number 5 September 2012. (Lewin and Patterson, 2012)	This article traces the co-evolution between models of research communication and development. It looks at how creative and visual methods fit into this trajectory. It argues that the current growth in the accessibility of communication technologies has emerged alongside a strong revival of more finear, marketing-style understanding of development research communication, which threatens to undermine their progressive potential. It argues that despite development research communicators having many more options available to them, in terms of tools and approaches, and a much better understanding of how to integrate research and communication, they are also under increased pressure to prove impact, or show direct attribution. It argues that the more democratised communication becomes, the more difficult it is to do this.	 Much of the literature, and the field of development research communication, is divided into those who focus on direct, instrumental, measurable policy impact, and those who are more concerned with broader systemic change. The creation of knowledge, and therefore development approaches, that lack social communication and inclusive dialogue reinforce structural relationships of power. One should always be sceptical of the optimism that accompanies innovative research communication approaches and technologies due to the digital divides and potential authoritative controls that accompany the use of these technologies. The diffusion of 'the internet, mobile communication, digital media and a variety of social software tools throughout the world has transformed global news media and communication systems into interactive horizontal networks' that connect local and global individuals and issues. As accessibility and reach of research transforms, so too does the role and the definition of a 'researcher'. Today, many researchers are playing an active role in working with individuals who are directly impacted by research findings. This change in role calls into question the traditional definition of 'researcher', but so does the transforming nature of producing and publishing information using alternative digital media and communications. With this development the once stark line dividing academia and professional and amateur writers (i.e. oped writers, bloggers, etc.) has become blurred. It seems ironic that in an era where we have so many more options in terms of tools and approaches, and a much better understanding of how to integrate research and communication, funders are demanding an approach based on calls to prove impact, or show direct attribution. Added to this is the complication that the impact of more inclusive, iterative, participatory models that have become increasingly possible as communication becomes more democratised, are n
Bridging research and policy in international development: an analytical and practical framework, Julius Court and John Young.	It often seems that researchers, practitioners, and policy makers live in parallel universes. Researchers cannot understand why there is resistance to policy change despite clear and convincing evidence for it. Policy makers bemoen the inability of many researchers to make their	 Often, the link between research and policy, or evidence and practice, is viewed as a linear process, whereby a set of research findings or lessons shift from the 'research sphere' to the 'policy sphere', and then has some impact on policy makers' decisions and programmes on the ground. Reality tends to be much more dynamic and complex, with two-way processes between research, policy, and practice, shaped by multiple relations and reservoirs of knowledge. Overseas Development Institute (ODI) has identified a wide range of inter-related factors that determine whether research-based and other forms of evidence are likely to be adopted by policy makers and practitioners; the political context; the evidence; and the links between policy and research communities. The quality of the research is important if it is to affect policy Influence over policy is affected by topical relevance and, as importantly, the operational usefulness of an idea; it helps if a new approach has been piloted and the resulting

The Impact of Research on Development Policy and Practice: This much we know.

A Literature Review and the Implications for ICT4D

- Introduction
 - Purpose of the review
- Opposing Perspectives
 - Two Communities
 - What is Impact?
- Thematic Overview of the literature





Q&A



Thank you for your attention

Prototyping Exercise

- In your project groups, let's draw a rough prototype for a music player (e.g. iTunes).
 - Assume that the program lets you store, organize, and play songs and music videos.
 - Draw the main player UI and whatever widgets are required to do a search for a song or video.
 - After the prototypes are done, we'll try walking through each UI together.
- Things to think about:
 - How many clicks are needed? What controls to use?
 - Could your parents figure it out without guidance?