The rapid structured literature review as a research strategy

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Abstract: A diversity of sources of literature encompassed by the management disciplines appears to result in a growing need for a systematic methodology to map the territory of management theory. As such, when scoping out a study, structured literature review (SLR) can be considered as a means by which any critical, central literature might be considered. However, there is little guidance, or evidence, of this being undertaken for the purposes of small scale projects such as undergraduate or masters’ dissertations. This paper reports four case studies of master’s degree students following management programmes of undertaking a structured literature review (SLR) and the issues and problems they had to encounter during their journey. The findings from the case studies suggest that in terms of time to complete and the volume of output required in terms of word count, Tranfield, et al’s (2003) approach to SLR’s, whilst suited to doctoral level research is not appropriate generally when dealing with undergraduate and masters research projects. Therefore, this paper provides accounts of the experiences of four students who undertook SLR for their undergraduate or master’s degree dissertation. The paper identifies that these students had to deal with a new set of conceptual problems relating to this “unorthodox” approach to a postgraduate research dissertation in coming to terms with new paradigms of enquiry that are not normally taught as part of a traditional research methods course. This was despite gaining a greater depth of insight into the subject area through a more rigorous and structured manner. The paper presents alternative remedies by way of a rapid structured literature review (RSLR) model. This would appear to be more appropriate to the conducting of small scale literature based research projects when used with undergraduate and master’s degree students than SLR identified for other research activities.

Key words: systematic literature reviews; synthesis; rapid structured literature reviews

1. Introduction: Overview of current debate

The global economy has meant that organizations need to utilize their knowledge management systems more effectively (Eisenhardt & Santos, 2002; Conner & Prahalad, 1996; Spender, 1996; Leonard-Barton, 1995; Davenport & Prusak, 1998), and that those who possess the mechanisms to access this source of information will be able to capitalise on its application. Further that “it is important that the scholarly and practitioner communities develop processes and methodologies for bringing research evidence together systematically and applying it in practice” (Tranfield & Denyer, 2003).

It can be argued that because of the diversity of sources of literature encompassed by the management disciplines, there is a growing need for a systematic methodology to map the territory of management theory. As such, structured literature review (SLR) can be considered as a means by which any central literature might be
considered when scoping out a study. Qualitative research synthesis has developed and been tested across a range of disciplines including management, public health, social care and education (Tranfield, et al., 2003). According to Denyer and Tranfield (2006), “Whilst each of the approaches has been used to produce qualitative research synthesis, in most cases examples of their application are limited. However, the use of three approaches, narrative synthesis, meta-ethnography and realist synthesis, has increased rapidly across different disciplines”, therefore, SLR can more critically into the contents of a literature review. By undertaking a SLR approach rather “ad hoc” approaches to literature construction, development and presentation, there is a defence that critical literature may be identified alongside other materials relevant to the study. Petticrew (2001), Petticrew and Roberts (2006), have argued for a structured approach when reviewing literature. They identify differences between SLR’s approach as compared with the “traditional” type of literature reviews (see Table 1):

<table>
<thead>
<tr>
<th>Issues to consider</th>
<th>Good quality systematic reviews</th>
<th>Traditional reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deciding on review question</td>
<td>Start with clear question to be answered or hypothesis to be tested.</td>
<td>May also start with clear question to be answered, but they more often involve general discussion of subject with no stated hypothesis.</td>
</tr>
<tr>
<td>Searching for relevant studies</td>
<td>Strive to locate all relevant published and unpublished studies to limit impact of publication and other biases.</td>
<td>Do not usually attempt to locate all relevant literature.</td>
</tr>
<tr>
<td>Deciding which studies to include and exclude</td>
<td>Involve explicit description of what types of studies are to be included to limit selection bias on behalf of reviewer.</td>
<td>Usually do not describe why certain studies are included and others excluded.</td>
</tr>
<tr>
<td>Assessing study quality</td>
<td>Examine in systematic manner methods used in primary studies, and investigate potential biases in those studies and sources of heterogeneity between study results.</td>
<td>Often do not consider differences in study methods or study quality.</td>
</tr>
<tr>
<td>Synthesising study results</td>
<td>Base their conclusions on those studies which are most methodologically sound.</td>
<td>Often do not differentiate between methodologically sound and unsound studies.</td>
</tr>
</tbody>
</table>

Boaz, et al (1999) have advocated the use of systematic literature reviews (SLR) concerning policy based practice. They have examined ways in which systematic reviews present a distinctive approach to the synthesis of research and the exploration of challenges faced by researchers who use systematic review outside clinical medicine. Further they identify that SLR is sometimes considered contentious in the social policy and practice field. Boaz, et al (1999) investigate where the social sciences can contribute to the development of review methodology, for example, through sharing experience of user involvement and approaches to qualitative research. However, Hammersley (2002, p. 1) notes, “It is important that the practical use of research takes in the whole range of findings on a topic, not just the results from one or two studies. For this reason, reviews play a crucial role as a bridge between research and related areas of policymaking and practice”. His motivation for this is provided in his sentiments when he states that:

Indeed, the increasing tendency for the mass media to report evidence from single studies in controversial areas, particularly in the health field, is to be deplored. This can be dangerous in its immediate consequences. Moreover, I suspect that, down the line, it will lead to further erosion in the public authority of scientific research.

Hammersley (2002, p. 3) challenges the term “systematic” and claims that to undertake “unsystematic” literature review would be foolish. The very definition of systematic is “to produce a systematic review is simply to do the job of reviewing well”, but further that “I have heard it suggested that there are people who would want
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a review to be unsystematic, even in this sense: Those who want to select and interpret research evidence so as to support their own pre-given views or interests, and thereby to claim scientific backing for these”. This presents then a view that the very process of choice in terms of how to conduct a literature review is in fact a systematic approach. Transparency therefore an important aspect when conducting a SLR (see for example Tranfield, et al., 2003), but Hammersley (2002, p. 4) suggests that this is not without problems. Hammersley (2002) makes three points. First, explicitness is a matter of degree, i.e. the way in which they were carried out. Second, there is a point beyond which it is impossible to make any activity, including reviewing, explicit. The metaphor involved in the word “transparency” implies that anyone can see, or perhaps can see through, what is going on. In other words, it is assumed that there are no audience requirements for understanding and evaluating an activity other than possession of a pair of eyes. The third point concerns the notion of transparency. The concept of systematic review seems to imply that transparency can be achieved if the task of reviewing is formulated beforehand in terms of a set of procedures to be followed. Boaz, et al (1999, p. 48) also note that:

There are a wide variety of approaches to reviewing evidence, from traditional literature reviews, to rapid reviews and systematic reviews. Traditional reviews offer a summary of a number of different studies and sometimes draw conclusions about a particular intervention or policy. Rapid reviews are carried out to meet pressing policy demands or to lay the ground for a more comprehensive, systematic review. Policy makers also use review methods, such as specially commissioned scoping studies and briefing papers, to inform policy developments.

2. Undertaking a SLR

The foregoing debates concerning SLR’s are well developed in the extant literature. However, our concerns are with the lack of appreciation for small scale projects conducted by undergraduate and master students. Guidance for Masters and undergraduate students focusing upon literature reviews tends to present it as a mechanism that will underpin a study. This will then allow for the development of a theoretical context or framework in order to frame research questions (see for example Hart, 1998; Fink, 2005; Mertens, 2005) that use inductive, deductive or mixed methods approaches to the collection of primary and secondary data. The notion that the SLR might be appropriate as a research strategy on its own appears to be overlooked by these writers. As such any debate surrounding this approach has not yet developed in the same manner that it has of the SLR for doctoral or post-doctoral research. It should be acknowledged though that Hart (1998), Fink (2005) and Mertens (2005) provide a protocol for undergraduate and master’s research projects that can be used when developing and writing a literature review. However, this is firmly placed in a study for the theory development, methodological justification and interpretation of findings within the project. The consequence of this “traditional” approach to viewing the use of a literature review, therefore, leaves a dearth in the extant literature regarding any debates encircling this area, or the reporting of empirical studies that have attempted to apply SLR with undergraduate and master’s students, which is not considered. As such, we provide here the experiences from four students who have used the SLR approach as a means conducting a small scale piece of research. These include two masters dissertations and two undergraduate degree students who opted to carry out a SLR for their dissertation. The profiles for each student are as follows:

(1) Student A: This student was following a full-time masters degree programme in Human Resource Management and undertook SLR in High Performance Working.

(2) Student B: This student was following a part-time MBA programme and undertook SLR in Corporate Social Responsibility.
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(3) Student C: This student was a full-time student following a BA (Hons) in Business Management and undertook SLR in Corporate Social Responsibility.

(4) Student D: This student was a full-time student following a BA (Hons) in Business Management and undertook SLR in Marketing.

Within their studies all the students had undertaken a taught research methods module, prior to undertaking their dissertation, and for this were required to produce a research proposal (2000 words for the undergraduate students, 4000 for the master’s students) which had been assessed. To progress from this stage then, to formulate a set of research questions, students used Tranfield, et al’s (2003) ten phases approach to undertaking a research project. As researchers, we wanted to explore the experiences of students as they went through the phases and therefore, we adopted a grounded approach to the study in order to generate insights about their research journey. As a result, the following questions were formulated which we asked each student after they had completed the SLR process within a semi-structured interview environment. Each interview lasted for approximately 1 hour:

1. Did you have to adopt a different way of thinking about your research problem in order to a SLR?
2. Did you encounter any difficulties locating your study in a research paradigm?
3. Tell us about your experience of creating your literature map
4. Tell us about your experience of mining data from the databases
5. What did you learn from the SLR in terms of the subject, your knowledge of the subject area, the experience of doing the SLR?
6. What difficulties did you encounter when reporting the SLR in your dissertation?
7. Would you recommend the SLR to other students? If yes—why? If no—why?

The findings of the fieldwork were analysed using grounded analysis (Easterby-Smith, 2002) in order to categorise the responses given by the students. This paper provides the experiences of those students. The findings fell under four broad categories which emerged from the data as follows, the analysis of which follows. In the next section of this paper:

1. The need to do a SLR;
2. The identification of the problem;
3. Conducting the SLR and mapping the literature;
4. Reporting the SLR.

3. The need

Three of the students decided to do SLR because they did not have access to an organisational context in which to conduct their research. Their decision to opt of this approach became an “obvious” choice after they had started to formulate the issues they were interested in researching.

Student A stated:

I just don’t want to do any old project, I want to do a decent job for my dissertation—I want to get something out of the experience of doing my dissertation, but how can I do this if I can’t get into an organization?

This was also similar to student C, who voiced their opinion as follows:

I’m not interested in doing primary data collection—we were told that we had to. I would rather do something I want to rather than be forced to do a dissertation “just to pass” the module.
Student B though offered a different reason for wanting to do SLR stating that:

I want to keep dissertation away from working environment. I might be moving job soon and want to do something that will have wider benefit to me when looking for a new job.

However, all of them did want to extend knowledge of subject to greater depth and they saw the SLR as a means to do this. Student C wanted to extend his knowledge of the material he had learned from his taught modules, noting that:

I am really interested in my subject area and the SLR seems as though it might offer me to explore some of the issues to a deeper level.

Student D echoed the same sentiments stating that:

By looking at my topic I can really get to grips with the subject matter in a way that was not possible in my module. Mapping out the issues will be a challenging experience and will help me focus on the subject area and hopefully produce rigorous research.

Student A expressed the need for knowledge in terms of:

Helping me get my first job when getting my masters as it might help in interview situations.

4. The identification of the problem

The idea of “consciously” having to consider this aspect of the research process was something that caused concern amongst the students. Whilst they had all produced a research proposal, it became apparent that they had produced a collection of literature that did not necessarily have any clear links. The literature sources did have a connection in as much as it located them in their subject but as they had not mapped these out in any coherent or holistic manner, it lacked linkages as a well defined set of arguments. This caused anxiety amongst all four candidates as they had to re-evaluate their thinking about what constituted a critical literature review that shows threads and connections in its contents. However, when confronted with the requirements of SLR, it became apparent to the students and they grasped the need to produce a “more rigorous” landscape of the area they intended to cover in their research. Whilst on the surface SLR has the “same feel” as a traditional type of dissertation, the problem definition and establishment for the focus of the SLR exposed the students to “hidden” subtleties in terms of the way they approached their problem definition, and the subsequent research questions to be investigated. This part of the research process took much time and effort for all of the students utilising the SLR approach.

For example, student A had difficulty coming to terms with the apparent level of specificity of the SLR focus because:

It means that I need to have a real tight subject focus because when I come to my literature search I will end up with maybe thousands of articles and I won’t be able to deal with this amount of data.

The same problem arose also for student B:

The focus of the study was important because it was so easy to lose focus. The SLR was making me keep a tight focus on my topic area, it keep me questioning my original topic and whether it was the right one.

Student D noted also that:

The conceptual map I constructed when thinking about my topic was invaluable—it was the most important piece of paper for this part of the SLR. I kept updating it as I went along—it was invaluable as a means to focus my research topic.
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The issues of abstracting, “tight-loose” thinking and making connections across concepts and theories became a real living entity for all the students. As is conveyed by student D, who said:

It was really challenging—I would get to what I thought was my focus then I would see other avenues to explore. It was really difficult to see what my focus was, I seemed to be getting further and further away from my original ideas.

Student C found this task quite challenging and noted that:

I was not sure if I was doing it right—for once I had to decide where I would take my topic rather than having to answer a pre-set assignment question. This was an unusual place for me to be in as I was in control of my work.

Whereas, after the initial traumas of abstracting and finally reaching a tight focus, the construction of research questions did seem easier. Student B’s statement was echoed by another student when she noted that:

Once I had created a really focused conceptual framework I was then in a position to create really focused research questions—which helped me define my literature research strategy. This part of the dissertation was certainly hard and intellectually challenging—but the structure certainly helped me attain a greater level of awareness of my problem.

5. Conducting the SLR and mapping the literature

This stage was perhaps one of the more straightforward parts of the dissertation process. It did appear to be more time consuming than the traditional approach. Further, it required dedicated application on data bases to extract papers and sift through them using a “quality” evaluation to access the papers before further sifting. As student A noted:

The data mining process was a rather time consuming process. Firstly because the subject was new to me and it took me a goodly number of articles to read before I was able to define the key words. In the beginning I kept my mining broad by using only CSR in the title of the articles. The structural part in the review gave me a stringent thread which helped me to sort out connections, similarities and differences within the argumentation of a subject area.

All the students needed help and advice concerning this task. Typical issues that all the students encountered were as follows:

(1) What strategies shall I use to create strings and Boolean operations to put into the data base?
(2) How shall I deal with the volume of articles I might find?
(3) How far back shall I go?

Additionally, after they had undergone this part of the dissertation process, it became apparent that:

(1) Updating the conceptual map as the literature search progressed was an essential feature.
(2) It was essential also to refer back to the original questions continually to help keep thinking “on track”.
(3) The SLR did produce more “rigorous” thought processes.
(4) The creation of a set of quality criteria for article selection proved a challenge because the students, unlike academic authors, were not aware of the processes for assessment of journal articles for publication.
(5) There were questions when mapping the literature, connecting themes and issues, e.g., should this be by year, subject or author?
(6) Due to the time constraints there was not a need to use of a quality panel of experts, practitioners and academics (Tranfield, et al., 2003) given the reduced time scale of their research as compared to a doctoral thesis.

6. Reporting the SLR

This part of the dissertation caused a few problems. The students had to accept that SLR is a research
strategy in its own right since in a traditional dissertation the research strategy does not start until the research and design methodology chapter. This required them to change their mind-set from their earlier instruction from the research methods module. Further, the reporting stage of the SLR presented them with a new methodology and data analysis approach. Hermeneutics and narrative analysis are not usual areas covered in business research modules and they all needed extra tutorial support for this methodological approach. However, though this might have been an initial obstacle student A typifies the general tenor, when she stated that:

(Yes) I would highly recommend SLR to other students. I found the combination of structured literature review and the hermeneutic approach a suitable combination. For me as a newcomer into subject area of CSR, the hermeneutic approach gave me the opportunity to interpret texts in regard to my previous knowledge. The structural part in the review gave me a stringent thread which helps to sort out the connections, similarities and differences within the argumentations of the concept.

It was also apparent that the students were unsure as to how to deal with unstructured data, i.e. analysing the literature for themes and issues. After been shown the grounded analysis procedure by Easterby-Smith, et al (2002) for data analysis, the two postgraduate students grasped this fairly easily. They felt more at ease that their undergraduate counterparts, who had been shown the “usual” questionnaire type of approach in their research module and only a “sketchy” explanation as to how they might analysis unstructured qualitative data. However, after receiving guidance on this feature of the reporting of the RSLR, they realised that it was “just the same” as a normal dissertation, where secondary data might have to be used and analysed. After completing her RSLR, student A stated:

There are two things that I have learned during the process of making up a structured literature review. First, how to read a text in critical way by sorting out the aims, objectives, findings and conclusions of the text. Tracing the argumentation of the author and find the evidence for his/her statements and extracting themes. Second, the structured literature review process as a tool to trace the development of a subject. It is a useful way in gaining knowledge into a new subject area.

In summary, the students required further guidance with the following issues:

1. The interplay of documentary data and analysis;
2. Dealing with unstructured data;
3. Familiarisation with grounded analysis;
4. Familiarisation with new methodological approaches: hermeneutics and narrative analysis;
5. Interpretation of the findings: writing narrative to analyse historical linkages across the literature;

7. Conclusions

This paper has presented the rapid structured literature review (RSLR), which has been developed from our experiences to date of supervising SLR undertaken by masters and undergraduate students. The RSLR has been constructed as three major stages: conceptualisation (the need and problem definition); operational aspects (conducting the literature search); structuring and reporting the RSLR (reporting). This reflects the categories presented in the previous section. Since the students reported that they could not find the resources and time to include the quality panel stage into a six-month project schedule allocated for their dissertation, the RSLR procedure broadly follows Tranfield, et al’s (2003) ten-stage model, but does not include the quality panel stage. However, there is included a suggested epistemological framework in which the RSLR can be located. This does not appear in any literature concerning SLR. Also included is a suggested data analysis procedure. Again this is
drawn from the experiences found when supervising students. The three stages are therefore, based upon "real experience" from the field and not theoretical or hypothetical "model making". The three stage eight step model we suggest is presented within appendix 1.

The paper has identified the diversity that the use of SLR addresses within the management sciences and presents that this approach offers a strategy for dealing with the fragmented ontological and epistemological tensions that exist. Within the management field, this is exacerbated further, by the methodological status of management sciences concerning the theory versus practitioner debate that pervade its literature. The subsequent call for a pragmatic melioration of perspectives, that recognises and combines “soft” and “hard” issues of the management landscape is perhaps the way forward (Tranfield, et al., 2003). As Denyer and Tranfield (2006) note:

Existing management research will not contribute to management practice if individual studies simply accumulate in academic journals. In many social science fields tight coupling of the science base to policy and practice has involved reviewing fields of literature in order to synthesis and convey essential collective wisdom from existing research studies to professional practice.

Based upon the evidence and experiences to date from the field, however, we are suggesting that the application of SLR to small scale projects at undergraduate and master’s level is possible. However, the “standard approach” to conducting a SLR, as identified by Denier and Tranfield (2006), when applied to studies that involve the single researcher needs to modified into the more manageable research strategy, for example a rapid structured literature review (RSLR). Whilst acknowledging the rather “directive approach” of the RSLR strategy presented in this paper, it is argued that it has produced a more fulfilling and richer experience for students who are frustrated in applying the former SLR since they cannot access primary data sources when completing their dissertation research projects.

The development of the RSLR has also revealed, and encouraged a more rigorous approach to accessing and mapping out a subject area, that goes beyond the “normal depth” that can be achieved in a taught module. It is suggested that “forcing” students to follow the RSLR strategy has paradoxically “freed up” and extended their thinking because it has taken them to places in the literature that they were not aware of, or realised was connected together, within a social context and historical development of their subject. If the strictures of the RSLR strategy presented in this paper should be criticised, that this seems a small price to pay, if it achieves a more “rigorous” approach when undertaking management research. This is because it provides the foundations and platform upon which to challenge students to become clearer and more critical in their thinking. These are the tenets upon which management research is founded.

References:
Hammersley, M. (2002). Systematic or unsystematic, is that the question? Some reflections on the science, art and politics of
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(Edited by Jean and Max)

Appendix 1: Rapid structured literature reviews (RSLR)

Stage 1: Conceptualization

1. Introduction
   a) Justification and rationale of topic and RSLR
      • Identify and justify the research topic.
      • Why is the topic important to investigate?
      • What is the rationale and reasons for doing a RSLR?
      • Describe the stages of conducting the RSLR research strategy
   b) Formulate the research aims, objectives and questions.
   c) Create a conceptual map of topic area and issues (see Appendix 1 for an example)

2. Define the scope and range of the RSLR using the conceptual map to determine:
   • Is the RSLR going to focus on interpretive, positivistic or mixed methods studies in the extant literature, or will it consider a combination of these approaches – an inter-disciplinary approach? For example:
      • Personal histories – narrative analysis
      • Culture - ethnographies
      • Events and single cases - case studies
      • The experiences of people – phenomenology
      • Analysis of language – discourse analysis
      • Analysis of behavior – interaction analysis or symbolic interaction
      • Study of phenomena of mass media communication – internet research
      • Populations - survey’s
      • Scientific research – experiments
   • Time frame the RSLR will cover
   • Type of seminal articles to include in RSLR such as:
      a) Peer revived journals
      b) Professional journals
      c) Conference proceedings
      d) Market research
      e) Organizational literature
      f) Official statistics: Government and company sources
      g) Dissertations/thesis/unpublished papers
   • Seminal authors to include in RSLR
   • Geographical location the RSLR will cover

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Stage 2: Operational aspects

3. Research design and methodology
   - Approach: Interpretive
   - Paradigm: Hermeneutics
   - Methodology: Narrative analysis of literature chosen for RSLR in step 2
   - Data collection and quality assessment. Access literature data bases using key words and strings using and/or Boolean operators to create article selection list. Use Refworks (or any other referencing tool) to save references. The following assessment frameworks may prove useful for considering the quality of literature (examples for recording this information are shown in the follows).

### Framework 1

<table>
<thead>
<tr>
<th>Conceptual framework</th>
<th>Are the following appropriate for the study?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Paradigm</td>
</tr>
<tr>
<td></td>
<td>• Approach/strategy/methodology</td>
</tr>
<tr>
<td></td>
<td>• Research methods and instruments</td>
</tr>
<tr>
<td></td>
<td>• Findings</td>
</tr>
<tr>
<td></td>
<td>• Reliability</td>
</tr>
<tr>
<td></td>
<td>• Internal and external validity</td>
</tr>
<tr>
<td></td>
<td>• Ethical concerns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research design and methodology</th>
<th>What are the aims, objectives, questions/hypothesis identified?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• How is the body of knowledge linked to research questions?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Findings and analysis</th>
<th>Are the results presented in a clear fashion?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• How is the literature use to interpret the findings?</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Conclusions</th>
<th>Does the study re-visit the research questions?</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>• Does the study critique the approach taken/</td>
</tr>
<tr>
<td></td>
<td>• What implications are there for practice?</td>
</tr>
<tr>
<td></td>
<td>• What further research needs to be undertaken?</td>
</tr>
</tbody>
</table>

### Framework 2

Another example and perhaps more explicit set of issues could also be used to assess the quality of articles is provided by pattern (1990, cited in Hart, 1998, p. 49):

<table>
<thead>
<tr>
<th>Issues</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the purpose of the study?</td>
<td>Basic research, applied research, summative evaluation, formative evaluation, action research, illuminative evaluation, ethnomet hodology.</td>
</tr>
<tr>
<td>What is the scope of the article contents?</td>
<td>What is included, excluded, why and to what effect?</td>
</tr>
<tr>
<td>What is the focus of the study?</td>
<td>People, policy, programme. Breadth versus depth, case study, survey, chronological, comparative and so on.</td>
</tr>
<tr>
<td>What are the units of analysis?</td>
<td>Individuals, groups, programme components, whole programmes, organizations, critical incidents, time periods and so on.</td>
</tr>
<tr>
<td>What is the sampling strategy?</td>
<td>Purposeful, probability, quota, random, size, representation, significance and level of generalisability.</td>
</tr>
<tr>
<td>What types of data were collected?</td>
<td>Qualitative, quantitative.</td>
</tr>
<tr>
<td>How were the data managed?</td>
<td>Organization, classification, presentation, referenced, indexed and so on.</td>
</tr>
<tr>
<td>What analytical approach is used?</td>
<td>Deductive, inductive.</td>
</tr>
<tr>
<td>How is validity addressed in the study?</td>
<td>Triangulation, multiple data sources, multiple study.</td>
</tr>
<tr>
<td>When did the study occur?</td>
<td>Currency of findings, long-term investigation, short and snappy, phased and piloted.</td>
</tr>
<tr>
<td>How is the study justified?</td>
<td>Literature review and analysis, problem definition, practical outcomes, intellectual endeavour and so on.</td>
</tr>
<tr>
<td>How are ethical issues handled?</td>
<td>Informed consent, confidentiality of information, reactivity, and data protection and so on.</td>
</tr>
<tr>
<td>How are logistics handled?</td>
<td>Access to data and respondents, fieldwork, record keeping, data management and so on.</td>
</tr>
</tbody>
</table>
4. Findings from extant literature of the RSLR
- Create tables of descriptive information
- Created thematic relationships and connections Use Grounded Analysis to organize data themes, categories and issues
  
  
  a) Formulation  
  b) Reflection  
  c) Conceptualization  
  d) Cataloguing concepts  
  e) Recoding  
  f) Linking  
  g) Re-evaluation

5. Create a literature map of extracted literature. Link literature by:
- Theme?
- Author?
- Time series?
- A combination of these approaches?

An example is shown below of how a literature map has been created for High Performance Working.

![Literature Map Example](image)

**Figure 1** Evolution of HPW literature showing linkage of themes (Extract by kind permission from Masters Dissertation by Leigh Brown, MA HRM, 2006)

Recommended number of articles for level of programme:
- Undergraduate: 10,000 words 10-20 articles
- Masters: 15,000 words 20-25 articles
- Masters: 20,000 words 25-30 articles
- Masters: 25,000 words 30-35 articles

(N.B. these are not definitive numbers, but might serve as a useful guide)

Stage 3: Sense making
6. Discussions and Interpretations:
Can changing landscapes be identified in RSLR?
- Are there differences between authors’ views in RSLR?
- What are key lessons to be learnt from the RSLR in your field of study?
- Are there any insights for practice as a consequence of doing the RSLR?

7. Conclusions:
- Overall findings of the RSLR
- Re-visit: Research aims, objectives, questions of the RSLR
- Critique the RSLR approach: advantages and limitations
- Further work: Further RSLR, formulation of further research questions or hypothesis, design of further empirical work