Programme

• Topic/ Title/ Background/ Problem statement/ Questions/ Objectives

Tea:

• Literature review/ Methodology

Lunch:

• Data collection/ Data presentation & analysis/ Ethics/ Timeline/ Budget/ Chapter outline
Outcomes

On completion of this workshop, you will be able to (following the logic of proposal writing):

• Know and understand the research process
• Identify a relevant research topic
• Write a concise title
• Compile the background to the problem
• Identify the research problem clearly and justify its selection
• Write an explicit problem statement
Outcomes (continued)

- Formulate the main and investigative research questions
- Define feasible primary and secondary research objectives
- Align the problem statement, the research questions and research objectives
- Conceptualise a literature review = Review and synthesize previously published literature associated with the problem
Outcomes (continued)

• Select appropriate research methodology and design aligned with the research question
• Decide on the data collection to meet research objectives
• Explain the data presentation and analysis
• Consider ethical implications of research
• Draft a budget for the research expenses
• Understand the role of the supervisor
• Draft a research proposal
Sources

Primary source (all page references refer to):

Other sources:
Building the research puzzle
Developing a research proposal

• It is a research project that requires a
  – Clear project specification (scope) (p50)
  – Logical path to follow in solving the problem
  – And be fit for the purpose (p51)

• Any project has three constraints:
  – Deliverables (completed research report/thesis)
  – Time/Schedule (Gantt chart)
  – Cost/budget
Typical outline of a research proposal

• Title
• Rationale/Background (plus some literature review)
• Problem statement
• Research questions (main and investigative)
• Research objectives (primary and secondary)
• Literature review (main concepts & contextualisation)
• Research methodology
• Data collection and analysis
• Ethical implications
• Timeline and Budget
• Chapter outline
• References (30 for Master’s; 75 for Doctorate)
Preparation & more preparation p50

• Prior to writing the research proposal, you need to read and obtain an overview:
  – For your topic selection – know the
    • Available literature and relevant theory(ies) (ch 3)
  – To follow the research process:
    • Research philosophy & approach (ch 4)
    • Research design, methodological choice, research strategy & time frame (ch 5)
    • Access & ethical issues (ch 6)
    • Sample selection (ch 7)
    • Data collection & data analysis techniques (ch 8-13)
Research topic – attributes p28-29

- It excites your imagination
- It is one of your interests/passions
- It aligns with your skills
  - or you can develop the skill(s)
- It is financially viable (scope is manageable)
- It can be completed in a reasonable time
- Access to database or company is approved
- It is linked to academic theory – in context
- It aligns with your future aspirations
  - or your career goals
Sources of research ideas p31-37

- What emerged from a literature review?
  - What did you uncover?
  - What do you want to know that you do not know now?
  - What has not been covered by past research?
- What emerged from a media scan?
- What would be relevant to the business world?
- What are your strengths and weaknesses?
- What are the staff interests? Supervisors?
  - What topics are suggested by your department?
- What emerged from discussions?
Relevance or decision tree: contextualising research in a discipline

Disaster management

Supply chain management

Transport

Air

Water

Road

Warehousing

Procurement
Research topic – contribution

• Will you
  – Uncover new facts or principles?
  – Identify new relationships?
  – Challenge existing truths?
  – Explore the understanding of phenomena?
  – Suggest new interpretations of known facts?
Exercise 1 – Research topic

• Write down your research topic
  – Will your research topic make a contribution?
  – If yes, what type of contribution?

• Write down the title of your proposed research

• Motivate your choice of topic and title to your small group

• Do you need to select another topic?

• Do you need to revise your title?
Key questions to evaluate a research proposal p51 (checklist)

• What am I going to research?
  – Problem statement

• Why am I going to research this?
  – Exploratory; descriptive or explanatory

• Why is it worth researching?
  – Gap in literature or existing problem

• How does it relate to what has been researched before in my subject area?
  – Review all existing research for similar and related research, in my discipline, in my country or developing countries or any country
Key questions (continued)  p51 (checklist)

• Which theory(ies) will inform what I am researching and how will I use it(them)?
  – Theories in discipline and related disciplines

• What is my research question and what are my research objectives?
  – From the research problem flow the research question and objectives

• How shall I conduct my research?
  – Research methodology

• What is my research design?
  – Research design

• What type of data do I need?
  – Primary or secondary data or both
Key questions p51 (continued)

• Who and where are my intended participants?
  – Population; case

• How will I gain access?
  – Has permission been granted?

• How shall I select them?
  – Sampling frame and sampling strategy

• How will I collect my data?
  – Quantitative or qualitative data collection method or both

• How will I analyse my data and use this to develop theoretical explanations?
  – Statistical analysis; Content/thematic analysis

• Who and where are my intended participants?
  – Scope
Key questions p51 (continued)

- What data quality issues might I encounter?
  - Reliability; validity; trustworthiness

- How will I seek to overcome these?
  - Actions to be taken

- What ethical issues might I encounter at each stage of my research? What must my attitude be?
  - Avoid harm
  - Treat participants with respect
  - Honour the dignity of participants
  - Allow voluntary participation

- How will I overcome these?
  - Letter of consent for participants; Ethical clearance;
Title p53

• It is a brief, clear, concise description
• It is a summary of the research question
• It includes the main constructs/variables of the research
• Avoid unnecessary phrases eg
  – ‘A study to explore …’
  – ‘An investigation into … ‘
• 10-15 words maximum
Three functions of the background:

1. It introduces the reader to problem
   - It frames a research problem (provides context)
   - What am I going to do?

2. It provides a reason/rationale for the research
   - Why am I doing this?

3. It demonstrates
   - ‘how my research relates to what has been done before in this subject matter’

Each of these functions is discussed in more detail on the next slides
1. It introduces the reader to the problem -
   Frames a research problem
   What am I going to do?
   a. Setting of a problem; context & dynamics
   b. Evidence that a problem exists and
      i. the extent of the problem (how big is it) and
      ii. actuality of the problem (how real is it)
         ✓ Evidence in literature
         ✓ Evidence in business environment
   c. Inter-relatedness of the variables/constructs
Background – Function 2

2. It provides reason/rationale for research
   a. Why am I going to do this?
   b. Why is it worth doing? I will
      i. Apply a theory to a particular context
      ii. Develop a theory within a research setting
      iii. Test a theory within a given context
      iv. Justify the need for this research from
          – Statistics or other data
          – Examples from real life
Background – Function 3

3. It demonstrates ‘how my research relates to what has been done before in this subject matter’
   
a. Overview of key literature sources and research
b. Overview of relevant theories
c. Clarify where my proposal fits into the debate in the literature (What has been done, but what is missing?)
d. Show ‘which theories will inform what I am doing and how I will use them’

NOTE: It is NOT a detailed review of literature
It is a start of the process that leads to the critical literature review in a subsequent chapter.
Rationale: for literature review

• What is currently known?
• What is partly known?
• What is currently not known?
• What misinterpretations have occurred?
• What limited interpretations have occurred?
• What research designs have not been used?
• What new constructs can be added to existing research?
Funnel approach

Research problem

- Evidence of problem
- Gap in literature
- Rationale for the research
Exercise 2 - Background

• Compile the outline for your background. Ask yourself:
  – Have I introduced the reader to the problem?
  – Have I framed my research problem? What am I going to do?
  – Have I provided a reason/rationale for my research? Why am I doing this?
  – Have I demonstrated ‘how my research relates to research that has already been done in my discipline, in my focus area?

• Present your rationale to your group
• Are they convinced?
Research problem

• Write an explicit problem statement
  – Focused – in one sentence
  – Use specific scientific language
  – Is it practical/researchable?

• Is it logical? Does it lead to –
  – purpose
  – research questions
  – research objectives

• Does it contain the variables/concepts to be studied?

• The problem is ........
Research problem (cont)

- Problem can exist in the business world –
  - real world problem, eg lack of harbour capacity

- Problem can emerge from the literature
  - Identified by prior researchers (suggestion for future research
  - Gap in the academic literature/research

- Depending on the nature of a problem
  - it contains the constructs that will be researched

- A construct is –
  - an abstract concept that is deliberately created to represent a collection of concrete forms of behaviour (Fox & Bayat 2007: 29)
  - eg Entrepreneurial intent has 3 constructs
Exercise 3 – Problem statement

• Write your problem statement
• Review your problem statement: Ask yourself -
  – Is the problem stated in one complete, grammatical sentence?
  – Is the area of study clearly limited/focused?
  – Am I already predicting the results/outcomes?
• Revise your problem statement
• Give it to the person next to you. Ask him/her to comment on the three questions above relating to your problem statement.
Research problem (cont)

If a problem is too big or complex, it can be subdivided into sub-problems (Fox & Bayat 2007: 26)

*Considering the problem:*

*What areas can be isolated for further examination?*

*Source for next slide:*

Subproblems

Characteristics of sub-problems:

• Each sub-problem =
  – A completely researchable unit
  – Constitute a logical subarea

• For each sub-problem
  – Data can be collected for interpretation

• Sub-problems add up to form the main problem
  – All areas of the main problem are covered

• Between 2-6 sub-problems – not more
Exercise 4 – Problem statement

• Review your problem statement
• Build a convincing argument that it is indeed a problem worth researching
• Present your argument to the group
• Was the group convinced?
• What evidence should you add?
Research questions

- Research questions follow from the problem statement and contribute to collectively answering the problem
  - 3 to 4 investigative questions
    - Investigative questions address the different variables/concepts/constructs
- Main question plus
  - Investigative questions address the different variables/concepts/constructs
- Questions should include forms of measurement
  - either quantitative or qualitative
- Purpose of the research questions
  - to focus the research and to guide the discussion
Writing a Research Question p40-43

• Descriptive questions
  – What, when, where, who, how, how much/many?

• Evaluative questions
  – How effective, to what extent?

• Explanatory questions
  – Why?
• Goldilocks test –
  – not too big,
  – not too small,
  – not too hot,
  – but just right for –
  ➢ this time,
  ➢ by this researcher,
  ➢ in this setting
Exercise 5 – Research questions

Review your main problem, and convert it into a research question.

• Break the research question up into sub-questions (2 or 3, maximum 4)

• Evaluate your investigative (sub)questions:
  – Are they completely researchable subprojects?
  – Is each sub-question clearly tied to the interpretation of the data?
  – Do your sub-questions add up to the totality of the main question?

• Present to the group
Writing research objectives

• Research objectives operationalise the research questions

• First, Define the **primary objective**: start with a verb
  – To investigate ..., to assess ..., to evaluate ..., to
  – Align primary objective with
    • the problem statement and
    • the main question

• Secondly, Define the **secondary research objectives**
  – Start with a verb: to determine ..., to calculate ..., to
  – Align the secondary objectives with the investigative questions
Research objectives (cont)

- Align the problem statement, the research questions and research objectives

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<th>Research problem</th>
<th>Research questions</th>
<th>Research objectives</th>
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<td>The problem is ...</td>
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<td>Investigative/Sub ? =</td>
<td>Sub objective = Sub objective =</td>
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</table>
• Criteria for useful research objectives

  – Transparency – What does it mean?
  – Specificity – What am I going to do?
  – Relevancy – Why am I going to do this?
  – Interconnectivity –
    • Objectives form steps in the research process
    • From objective 1 to the last one – logical execution
  – Answerability – Will this be possible?
  – Measurability – When will it be done? How will it be done?
Research objectives (cont)

• Objectives must lead to observable outcomes (p54)

• Objectives must comply with ‘SMART’
  – Specific
  – Measurable
  – Achievable
  – Realistic
  – Timely/timebound

• Objectives start with an active verb
  – to determine; to evaluate; to assess; to identify; to measure, to calculate ……
Exercise 6 – Research objectives

• Review your research problem, and main research question and convert it into a primary objective.

• Break the primary objective up into secondary objectives
  – Evaluate your secondary objectives:
    • Are they completely researchable subprojects?
    • Are the secondary objectives aligned to the subquestions?
    • Do your secondary objectives add up to the totality of the main objective?

• Discuss in your group
Assumptions

• Specify the
  – Presuppositions
  – Research assumptions - what is taken for granted
  – Limitations & delimitations

• Types of assumptions – four types
  1. Ontological assumptions
     ➢ Essence of the phenomenon being researched
  2. Epistemological assumptions
     ➢ Grounds of knowledge – how understand the world
  3. Assumptions concerning human nature
     ➢ Relationship being human beings & their environment
  4. Methodological assumptions
Contribution

• State the expected contribution of the research
  – This is critical for doctorate proposals
  – What would be the contribution to the body of knowledge?
  – Is it original, novel or an incremental contribution?
Literature review

• It is a critical assessment and summary of the range of past and contemporary literature in a given area of knowledge or selected disciplines.

• Purpose of a literature review to
  – Provide a sound theoretical overview of existing
    • research findings,
    • theories and
    • models relevant to the research problem
  – Situate and locate the research project and outline its context
Literature review – benefits to researcher

- Acquaint yourself with past and current developments in your field of research
- Uncover if research has already been done
- Know and understand the theory in field
- Identify the best methods to conduct the research – learn from other’s mistakes and problems encountered
- Provide a conceptual frame of reference against which your own research can be evaluated and your research results
Literature review model

- Conceptualise a literature review model
  - Demarcate the literature in key theoretical concepts
  - Example:
Literature review model

Example:

- Global business
  - Expanding overseas
    - Licensing
  - Medium-sized business
    - Strategic management strategies
Brief Literature Review

• Understand how to engage with the literature
  – Critically evaluate and synthesise literature with regard to the constructs
  – Present corresponding and contradictory views
  – Provide literature to justify the need for the research
  – Differentiate your research from existing research on the topic
  – Substantiate your research (constructs in the problem) through the use of recent and relevant
    • key sources;
    • ‘evergreens’;
    • ‘gurus’
Brief literature review

Special note

• For qualitative research in the proposal for
  – Analytical induction – a detailed literature review is required
  – Grounded theory –
    • provide sufficient evidence that a void exists in the research literature;
    • a void which you intend to fill
Exercise 7 – Literature model

• Conceptualise a model of your literature review
  – Draw a model/diagramme of the theories in which your research topic is embedded
    • consider the funnel approach
  – Add to the diagramme the disciplines to which your research problem connects and from which you will draw

• Present your model to the group
Research methodology p54-55

• Research methodology for the proposal is summarised on p54-55 but detail appear in subsequent chapters

• The two longest sections of the proposal are:
  – Background and
  – Methodology

• ‘How shall I conduct my research?’

• The onion (Saunders, Lewis & Thornhill, 2012;128)
Research logic
- example

- Research philosophy: Positivism
- Research approach: Deductive
- Methodological approach: Quantitative
- Research strategy: Survey, Questionnaire
- Time horizon: Cross sectional
- Data collection and data analysis
Subsections in methodology p54-55

- **Research philosophy** (ch 4 p127-): select from
  - Positivism (followed by post-positivism?)
    - causal relationships; hypotheses
  - Realism
    - there is a reality quite independent of the mind
  - Interpretivism
    - rich insight into complex world; understand phenomenon
  - Pragmatism
    - concepts relevant where they support action; use multiple methods
  - Critical theory
    - (Babby & Mouton, 2001)
Subsections in methodology p54-55

• *Research approaches* (ch 4 p143-): select
  – Deduction
    • Reason from general to specific
  – Induction
    • Reason from the specific to the general
  – Abduction
    • Generalise from the interactions between the specific and the general
Subsections in methodology p54-55

• Methodological approach (ch 5 p161-)
  – Mono method: quantitative
  – Mono method: qualitative
  – Multimethod: quantitative (more than one)
  – Multimethod: qualitative (more than one)
  – Mixed method: both quantitative and qualitative - simple
  – Mixed method: both quantitative and qualitative - complex

• See Method diagramme: Figure 5.2 p 165 (next slide)
Subsections in methodology p54-55

• **Nature of research design** (ch 5 p170-)
  
  – Exploratory studies
    • to gain insight through open questions
  
  – Descriptive studies
    • To gain an accurate profile of persons, events, or situations
    • Descripto-explanatory – first descriptive then explanatory
  
  – Explanatory studies
    • To establish causal relations between variables
  
  – Nature of the research must link to the purpose
Subsections in methodology p54-55

• *Research strategies* (ch 5 p 173-); select
  – Experiment – variables; hypotheses
  – Survey – questionnaires; quantitative data
  – Archival research – admin records & documents
  – Case study – phenomenon in its real life context
  – Ethnography – study groups
  – Action research – iterative process of inquiry
  – Grounded theory – develop theory inductively
  – Narrative inquiry – collect & analyse complete stories

• Or a combination of strategies
Subsections in methodology p54-55

- **Time horizon** (ch 5 p190-): choose from
  - Cross sectional
    - one point in time
  - Longitudinal
    - Repeated or monitored over a period of time
Exercise 8 – Research methodology

• For each of the headings, indicate what is appropriate for your research
  – Research philosophy
  – Research approach
  – Methodological choice
  – Research strategy
  – Time horizon

• Discuss in your group
Data collection

• Decide on data collection and analysis techniques
  – Unit of analysis – describe it (Collis & Hussey, 2009:115-116)
    • An individual, eg female CEO
    • An event/incident, eg marketing campaign
    • An object, eg product or service
    • A body of individuals, eg a department, community
    • A relationship, eg relationship between coach & coachee
    • An aggregate, eg collection of individuals such as suppliers of computer hardware
Data collection

• Decide on data collection and analysis techniques
  – Research population (p260) – demarcate it
    • Nature of your research population
    • Size of your research population
    • Sampling Frame (target population) from which sample will be drawn
  – Sampling strategy (ch 7 p258-) – select one
    • Diagramme – Figure 7.2 p 261
    • Justify sampling technique and sample size
  – Confirm access to a sample or case
Sampling

Probability

Simple
- Simple random

Systematic
- Systematic random

Stratified
- Stratified random

Cluster
- (random) cluster

Non-probability

Multi-stage
Sampling

- Probability
- Non-probability
  - Quota
  - Purposive
    - Quota
  - Volunteer
    - Snowball
    - Self
    - Convenience selection
  - Haphazard
    - Extreme case
      - purposive
    - Homogenous
      - purposive
    - Typical case
      - purposive
      - Critical case
        - purposive
      - Theoretical
Data collection techniques

‘What type of data do I need?’

Secondary of primary

• Using secondary data (ch 8 p304-)
  – What data?
  – Where is it located?
  – Has access been secured?
  – What is the quality/accuracy of the data?
  – How recent is the data?
  – Is the source of the data a trustworthy source?
Primary data collection

• Collecting primary data (ch 9 & 10)
  – Who will I be collection data from?
  – Where are my intended participants?

• What data collection instrument will I use?
  – Participant observation (ch 9 p342-)
  – Structured observation (ch 9 p 355-)
  – Interviews (ch 10 p372-)Forms of interviews – next slide
  – Questionnaires (ch 11 p416); electronic or paper
    • Structured, semi-structured and unstructured
    • Note: The actual questionnaire does not have to be included in the proposal
Interviews

Standardised

* Interviewer-administered questionnaires

  - Face-to-face Interviews
  - Telephone interviews
  - Internet- & intranet-mediated (electronic) interviews

Non-standardised

  - One to one
    - Group interviews
    - Internet- & intranet-mediated (electronic) group interviews
  - One to many
    - Focus groups

Data analysis

Describe the data capturing and analyses process:

• Quantitative data
  – Capturing the data
    • Who will capture the data?
    • Electronically through Survey monkey; manually;
    • Who will check that data has been correctly captured?
  – Analysing quantitative data (ch 12 p472-)
    • Self or Statistician
    • Programme – SAS, SPSS, MSExcel, Stata, EViews,
    • Types of statistics: descriptive; inferential, etc?
    • Econometrics? Or other
Data analysis

• Qualitative data
  – Recording the interviews
    • Will data be digitally recorded?
    • Who will do the transcription? Self or transcriber?
    • Will self-memos, research notebook, reflective diary be kept?
  – Analysing qualitative data (ch 13 p544-)
    • Analysis protocol, eg content analysis with codes, categorise and themes
    • Note: Transcriptions must be included in appendix of thesis
Exercise 9 – Data collection & analysis

• For each of the headings, indicate what is appropriate for your research
  – Unit of analysis
  – Population (sampling frame) or Case
  – Sampling strategy
  – Data collection plan
  – Data capturing plan
  – Data analysis

• Discuss in your group
Scientific canons of inquiry (ch 5 p192-)

• Reliability – threats
  – Repeatability/replicate

• Content validity
  – Measuring instrument covers investigative questions

• Construct validity (Yin, p46)
  – Correct operational measures for concepts studied

• Internal validity – threats
  – Seek to establish a causal relationship

• External validity
  – generalisation
Scientific canons of inquiry (ch 5 p192-)

• Options to evaluate Qualitative of research
  – Trustworthiness
    • Credibility
    • Dependability
    • Transferability
  – Legitimation
Exercises 9 – Scientific canons of inquiry

• Briefly comment on how you will deal with the following:
  – Reliability
  – Construct, Internal and External Validity
  – Or with
    – Trustworthiness

• Discuss in your group
International ethical principles

Saunders et al. (2012: 231-232)

• Integrity and objectivity of the researcher
• Respect for others
• Avoidance of harm
• Privacy of those taking part
• Voluntary nature of participation and right to withdraw
• Informed consent of those taking part
• Ensuring confidentiality of data and maintenance of anonymity of those taking part
Ethics principles

• Respect for cultural differences
  • what is sacred and secret; may need to use ‘gatekeepers’

• Justice, fairness and objectivity
  • selecting participants; not use same ones over and over

• Integrity, transparency and accountability
  • when conducting the research; not abuse power

• Risk minimization
  • Participants should not be exposed to risk

• Non-exploitation
  • Feedback to communities on results
Exercises 10 – Ethics

• Briefly comment on how you will ensure ethical compliance
• Discuss in your group
Resources (for Budget) p59

• Equipment
• Research assistants
• Travelling expenses to
  – Conduct interviews
  – Consult experts and/or supervisors – local and overseas
• Software programs for
  – Electronic questionnaires, eg SurveyMonkey
  – Data analysis, SPSS, Stata, SAS, Eviews, Atlas.ti, NVivo
• Data capturer/transcriber; data analysis assistance
• Statistician
• Language and technical editing
• Printing and binding
Exercises 11 – Budget

• Draw up a detailed budget for your research project calculating the costs related to
  – writing the thesis
  – conducting fieldwork
  – analysing findings
  – language editing
  – Printing and binding
  – Other expenses, conference

• Discuss in your group
Time scale \( p_{55} \)

Time scale is essential to assess the viability of the proposal

- Divide the research plan into stages
- Stages should at least provide for each chapter
- Provide for critical other activities not related to research
- Gantt chart eg \( p_{55} \) & \( p_{58} \)
## Gantt chart using a MSWord table

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</table>
Exercises 12 – Timeline/Gantt chart

• Draw up a Gantt chart for your research project – with realistic timelines
  – Did you allocate time for
    • Submitting the proposal to the colloquium?
    • Obtaining ethical clearance?
    • Your supervisor to review each chapter?
    • Processing your findings?
    • Language editing?

• Discuss in your group
References \( p_{59} \)

Two options

- Harvard reference system
  - changes from time to time
- APA system
  - More stable
- NOTE: strictly adhere to prescribed reference system
The beginning

Now you are ready to start running your research race.