

Week 1: Getting Started with Your Research Project

Research Methods in Management and Leadership

Lecturer: Jaliya de Silva

Academic Course

Week 1

Graduate Level

Learning Objectives

Master the fundamentals of research project planning, methodology selection, and proposal development

Understanding Research Problems

Essential Questions

Scale & Impact

How many people are affected by this problem?

Social Significance

Why is this an important social problem?

Interconnections

How does this problem impact other social issues?

Population Focus

Why is your target population important to study?

Problem Statement Framework

1. Problem Identification

Clearly define the specific issue or gap

2. Context & Background

Provide relevant situational information

3. Stakeholder Impact

Identify who is affected and how

4. Research Justification

Explain why research is needed

Example:

"Employee turnover in healthcare organizations has increased by 25% post-pandemic, affecting patient care quality and organizational sustainability..."

Literature Review Process

Core Components

Variable Analysis

Describe concepts and findings for each research variable

Relationship Mapping

Explore connections between variables (quantitative studies)

Influencing Factors

Identify other variables affecting your research focus

Population Context

Understand your target population characteristics

Analysis Framework

Key Terms & Theories

Define essential concepts and theoretical foundations

Consistent Findings

Identify patterns across multiple studies

Gaps & Controversies

Highlight areas needing further research

Methodological Review

Evaluate research approaches and limitations

Step-by-Step Process

- 1 Search Strategy**
Develop keywords and database selection
- 2 Source Collection**
Gather relevant academic sources
- 3 Critical Analysis**
Evaluate quality and relevance
- 4 Synthesis**
Integrate findings and identify themes
- 5 Gap Identification**
Determine research opportunities

Pro Tip:

Start broad, then narrow your focus as patterns emerge

Research Methodology

Quantitative vs Qualitative Approaches



Quantitative Research

Purpose

Test hypotheses, measure relationships, and generalize findings

Data Type

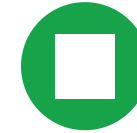
Numerical data, statistics, measurable variables

Methods

- Surveys and questionnaires
- Experiments and quasi-experiments
- Statistical analysis
- Large sample sizes

Best For

Testing theories, measuring effectiveness, comparing groups



Qualitative Research

Purpose

Explore experiences, understand meanings, and develop theories

Data Type

Text, narratives, observations, rich descriptions

Methods

- In-depth interviews
- Focus groups
- Participant observation
- Case studies

Best For

Exploring new phenomena, understanding context, generating insights

Research Design Fundamentals

Experimental Design

True Experiments

Random assignment, control groups, manipulation of variables

Quasi-Experiments

No random assignment, natural groups, comparison studies

Non-Experimental Design

Descriptive Studies

Surveys, case studies, observational research

Correlational Studies

Examine relationships without manipulation

Longitudinal Studies

Track changes over time

Key Design Considerations

Internal Validity

Can you confidently attribute results to your intervention?

- Control for confounding variables
- Use appropriate comparison groups
- Minimize bias and threats

External Validity

Can results be generalized to other contexts?

- Representative sampling
- Realistic settings
- Diverse populations

Reliability

Are results consistent and replicable?

- Standardized procedures
- Multiple measurements
- Inter-rater reliability

Feasibility

Is the design practical and achievable?

- Time and resource constraints
- Access to participants
- Ethical considerations

Sampling Methods and Techniques



Probability Sampling

Every member has a known chance of selection

Simple Random

Every individual has equal chance of selection
Best for: Homogeneous populations

Stratified

Divide population into strata, then sample from each
Best for: Ensuring representation of subgroups

Cluster

Sample groups/clusters, then all members within
Best for: Geographically dispersed populations

Systematic

Select every nth individual from a list
Best for: Large, ordered populations



Non-Probability Sampling

Selection based on researcher judgment or convenience

Convenience

Select easily accessible participants
Best for: Exploratory studies, limited resources

Purposive

Deliberately select specific types of participants
Best for: Expert opinions, specific characteristics

Snowball

Participants recruit other participants
Best for: Hard-to-reach populations

Quota

Fill predetermined quotas for different groups
Best for: Market research, quick surveys

Sample Size Considerations

Data Collection Methods

Primary Data

Surveys

Structured questionnaires for large samples

Pros: Standardized, quantifiable

Cons: Limited depth, response bias

Interviews

In-depth conversations with participants

Pros: Rich data, flexible

Cons: Time-intensive, subjective

Focus Groups

Group discussions on specific topics

Pros: Group dynamics, cost-effective

Cons: Groupthink, dominant voices

Observation

Direct observation of behaviors/phenomena

Pros: Natural behavior, contextual

Cons: Observer bias, time-consuming

Secondary Data

Government Data

Census, economic indicators, public records

Examples: Labor statistics, demographic data

Organizational Records

Company reports, financial statements, HR data

Examples: Performance metrics, employee records

Academic Sources

Published research, journals, dissertations

Examples: Meta-analyses, systematic reviews

Digital Sources

Social media, web analytics, online databases

Examples: Twitter data, Google Trends

Advantages:

- Cost-effective and time-saving
- Large datasets available
- Historical comparisons possible

Planning Checklist

- 1 Define Objectives**
What specific information do you need?
- 2 Choose Methods**
Match methods to research questions
- 3 Develop Instruments**
Create surveys, interview guides, protocols
- 4 Pilot Test**
Test instruments with small sample
- 5 Train Collectors**
Ensure consistency in data collection
- 6 Quality Control**
Monitor and validate data collection

Best Practice:

Use multiple data sources (triangulation) to increase validity and reliability

Ethical Considerations in Research

Core Ethical Principles

Beneficence & Non-maleficence

Do good and avoid harm

- Maximize benefits to participants and society
- Minimize risks and potential harm
- Consider long-term consequences

Justice

Fair distribution of benefits and burdens

- Equitable participant selection
- Avoid exploitation of vulnerable groups
- Ensure fair access to research benefits

Respect for Persons

Autonomy and dignity of individuals

- Informed consent process
- Right to withdraw at any time
- Special protection for vulnerable populations

Key Ethical Issues

Informed Consent

Participants must understand what they're agreeing to

Key elements: Purpose, procedures, risks, benefits, alternatives, confidentiality

Confidentiality & Privacy

Protect participant identity and sensitive information

Strategies: Anonymization, secure storage, limited access

Deception & Disclosure

When and how to reveal true research purposes

Requirements: Minimal deception, debriefing, justification

Vulnerable Populations

Extra protections for at-risk groups

Examples: Children, prisoners, mentally impaired, economically disadvantaged

Dual Relationships

Conflicts between researcher and other roles

Examples: Teacher-student, supervisor-employee, therapist-client

■ Institutional Review Board (IRB) Process

Research Proposal Structure

Essential Components

- 1 Title & Abstract**
Clear, concise summary of your research
- 2 Problem Statement**
Define the research problem and its significance
- 3 Literature Review**
Synthesize existing knowledge and identify gaps
- 4 Research Questions/Hypotheses**
Specific, testable research questions
- 5 Methodology**
Research design, sampling, data collection
- 6 Data Analysis Plan**
Statistical/analytical approaches
- 7 Ethics & Limitations**
Ethical considerations and study constraints
- 8 Timeline & Budget**
Project schedule and resource requirements
- 9 Expected Outcomes**
Anticipated contributions and implications

Writing Tips

Be Specific

Avoid vague language; use precise terminology

Show Connections

Link each section to your research questions

Justify Choices

Explain why you chose specific methods

Consider Audience

Write for your intended reviewers/readers

Quality Criteria

Significance

Will this research make a meaningful contribution?

Feasibility

Can this study realistically be completed?

Rigor

Are methods appropriate and well-designed?

Innovation

Does this offer new insights or approaches?

Finding Your Research Topic

Topic Selection Process

Key Questions to Ask

- What genuinely interests you?
- What problems do you observe in your field?
- What gaps exist in current knowledge?
- What would make a practical difference?

What NOT to Study

- Topics that are too broad or vague
- Questions already thoroughly answered
- Issues beyond your expertise/resources
- Sensitive topics without proper preparation

Remember

"A good dissertation is a done dissertation."

"A great dissertation is a published dissertation."

"A perfect dissertation is neither."

Feasibility Assessment

1. Data Access

Do you have access to the data you need?

- Participant availability
- Organizational permissions
- Database access rights

2. Stakeholder Consent

Can you get necessary approvals?

- IRB/Ethics committee approval
- Gatekeeper permissions
- Participant consent

3. Risk Assessment

Does your project pose risks?

- Direct harm to participants
- Dual relationships
- Confidentiality breaches

4. Competency

Are you qualified to complete this study?

- Required methodological skills
- Subject matter expertise
- Analytical capabilities

5. Resources & Time

Do you have adequate resources?

- Financial resources

Project Planning and Timeline

Research Process Timeline

1 Topic Selection & Refinement

Weeks 1-3: Identify and narrow your research focus

- Brainstorm ideas • Conduct preliminary reading • Refine research questions

2 Literature Review

Weeks 4-8: Comprehensive review of existing research

- Database searches • Source evaluation • Synthesis and analysis

3 Methodology Design

Weeks 9-11: Develop research design and methods

- Choose approach • Design instruments • Plan sampling strategy

4 Ethics & Approvals

Weeks 12-14: Obtain necessary permissions

- IRB submission • Institutional approvals • Participant recruitment

5 Data Collection

Weeks 15-20: Gather your research data

- Implement data collection • Monitor quality • Manage participants

6 Analysis & Writing

Weeks 21-28: Analyze data and write up results

- Data analysis • Interpretation • Draft writing • Revising

Planning Tools

Gantt Charts

Visual timeline showing task dependencies and milestones

Work Breakdown Structure

Break large tasks into manageable components

Milestone Tracking

Set and monitor key project checkpoints

Time Management Tips

Build in Buffer Time

Add 20-30% extra time for unexpected delays

Set Regular Check-ins

Weekly progress reviews with advisors/supervisors

Prioritize Critical Path

Focus on tasks that could delay the entire project

Document Everything

Keep detailed records of decisions and changes

Remember: Research is Never Linear!

Common Challenges and Solutions

Common Challenges

Participant Recruitment

Difficulty finding and retaining participants

Impact: Delayed timelines, reduced sample sizes, compromised validity

Access Barriers

Organizations or gatekeepers denying access

Impact: Need to find alternative sites or modify research design

Time Management

Underestimating time requirements for tasks

Impact: Rushed analysis, incomplete data collection, stress

Data Quality Issues

Missing data, measurement errors, response bias

Impact: Reduced statistical power, questionable findings

Resource Constraints

Limited funding, equipment, or support

Impact: Scope reduction, methodology changes, quality compromises

Ethical Dilemmas

Practical Solutions

Recruitment Strategies

- Use multiple recruitment channels
- Offer appropriate incentives
- Build relationships with gatekeepers
- Consider snowball sampling

Access Solutions

- Start relationship building early
- Clearly communicate benefits
- Offer to share findings
- Have backup sites identified

Time Management

- Create realistic timelines with buffers
- Break tasks into smaller components
- Set regular progress checkpoints
- Use project management tools

Quality Assurance

- Pilot test all instruments
- Train data collectors thoroughly
- Implement regular quality checks
- Plan for missing data scenarios

Next Steps and Resources

Where You Should Be Now

☐ Working Research Question

You should have a preliminary research question that:

- Is specific and focused
- Addresses a meaningful problem
- Is feasible within your constraints
- Can be refined as you learn more

☐ Feasible Project Concept

You should be thinking through:

- Potential data sources and access
- Appropriate methodology
- Ethical considerations
- Resource requirements

☐ Growth Mindset

You should be comfortable with:

- Starting somewhere and revising
- Iterative refinement process
- Learning from feedback
- Embracing the non-linear nature

Immediate Action Items

☐ For Next Week

- Read assigned chapters on research methods
- Become familiar with your chosen research area
- Bring laptop, tablet, to class
- Prepare for literature searching work

☐ Literature Search Preparation

- Identify 3-5 key terms related to your topic
- Think about synonyms and related concepts
- Consider different perspectives on your topic
- Prepare questions about database searching

☐ Reflection Exercise

Write a brief reflection (1-2 paragraphs) on:

- What research topic interests you most?
- What makes this topic important?
- What challenges do you anticipate?

☐ Helpful Resources

Library Databases: Access through institutional portal