

Research Methodology?

WHY Research/ Why Methodology? (Kenapa Meneliti/ Menyelidik? Knpa Metodologi)

To Discover / To Develop / To Test (New) Knowledge / Truth

(Untuk Menemui / Untuk Membangun / Untuk Menguji Ilmu (Baru) / Kebenaran?)

WHY?.... Truth? / The TRUTH?

(Kenapa? ... Kebenaran / KEBENARAN 'HAQ')

But.... Is the The TRUTH

Out there? (Di luar sanakah?)

In here? (Di dalam sinikah?)

Up there? (Di atas sanakah?)

Or are there many 'truths' (Atau wujudkah banyak kebenaran ?)

...Or can we know The TRUTH? (Mampukah kita mengetahui Kebenaran?)

Observing *Nusantara* from **Mount Bromo (Gunung Bromo)**: ...believed to be a Sacred place of Hindus in Java Island (Also known as Gunung Brahma)

MR20210323USM

Lima Falsafah Penyelidikan, by Reevany, Eleesya and Blaikie (2004)

z

Sama ada anda pembaca, penyelidik, ilmuan, mahupun individu yang hanya berminat untuk mengembangkan ilmu falsafahnya, buku ini akan membantu anda membanding dan mengaplikasikan strategi dan falsafah ilmu yang sesuai untuk memahami manusia dan dunia moden, baik sekitar kehidupan seharian atau ekonomi politik global mahupun dalam perniagaan dan organisasi kerja.

Penghasilan dan penilaian ilmu serta penyelidikan merupakan tugas teras para ilmuan. Namun ramai yang melibatkan diri dalam penjanaan ilmu dengan menekan aspek kaedah penyelidikan, dan mengambil enteng impak paradigma falsafah yang mendukung strategi penyelidikan. Seyogia, status ilmu yang terhasil boleh dipertikai sekiranya falsafah tidak secocok dengan pendekatan penyelidikan. Apabila diterima sesuatu yang zahir, yang batin juga terpendam dalamnya.

Buku ini menyaran supaya sebelum memulakan kajian atau menutup tirai kesimpulan, para ilmuan seharusnya memikirkan beberapa persoalan yang magnus pentingnya, iaitu: "Apakah kualiti strategi pembinaan ilmu yang dipilih?" Apakah paradigma falsafah yang termaktub di sebalik strategi tersebut?

Adakah paradigma ilmu itu lebih bermirip Falsafah Positivisme (berorientasikan deria) yang mendasari Strategi Induktif.

Falsafah Kritikal Rasionalisme (berorientasikan logik) yang mendukung Strategi Deduktif.

Falsafah Saintifik Realisme (berorientasikan realiti hakiki) yang memandu Strategi Retroduktif,

Falsafah Interpretivisme (berorientasikan pengalaman subjektif) yang membuahkan Strategi Abduktif.

Falsafah Penyelidikan Islam (berorientasikan prinsip).

Atau gabungan falsafah dan strategi tertentu ?

Apakah kekuatan dan kelemahan setiap strategi ini? Siapakah tokoh-tokoh pemikir di sebalik setiap strategi dan falsafah ini?

Buku Lima Falsafah Penyelidikan ini memperkenal gagasan pemikiran di sebalik lima falsafah dan lima strategi pembinaan ilmu. Isu-isu penting seperti epistemologi, ontologi, pembentukan teori dan analisis, serta kelemahan dan kekuatan setiap paradigma ilmu dibincang dan disertakan dengan contoh-contoh dalam sains sosial dan pengurusan.

"Selamat Memperkasa diri sebagai Ilmuan"

ISBN 983 4028 - 1 - X

LIMA FALSAFAH PENYELIDIKAN
Paradigma dan Strategi Penyelidikan

Paradigma dan Strategi Penyelidikan untuk Sains Sosial dan Pengurusan

Harré Deming Bhaskar Ilmu Obiektif Francis Bacon Ilmu Subjektif Interpretivisme Ilmu Mugashafah Pernyataan Normatif Objektifikasi Kehidupan Pemahaman Bermotivasi Hukum-hukum Umum Kritikal Rasionalisme Kedualan Struktur Medan Empirikal Anthony Giddens John Stuart Mill Keterima-abaian Intersubjektiviti Interpretivisme Justifikasisme Nominalisme Positivisme Max Weber Jenis Ideal Falsifikasi Atomisme

Kuhn

Dilthey Induktif Abduktif Retroduktif Realiti Total Pengurusan Hermeneutik Bakat Inventif Binaan Order Kedua Binaan Order Pertama Andaian Epistemologikal Mekanisme Penyebab Penyelidikan Islam Andaian Ontologikal Saintifik Realisme Epistema Tauhid William Whewell Fenomenalisme Anti-naturalis Medan Hakiki Fenomenologi Strukturasi Karl Popper

Verstehen

Deduktif

Koligasi

Schutz

KnowledgeCraftsmen

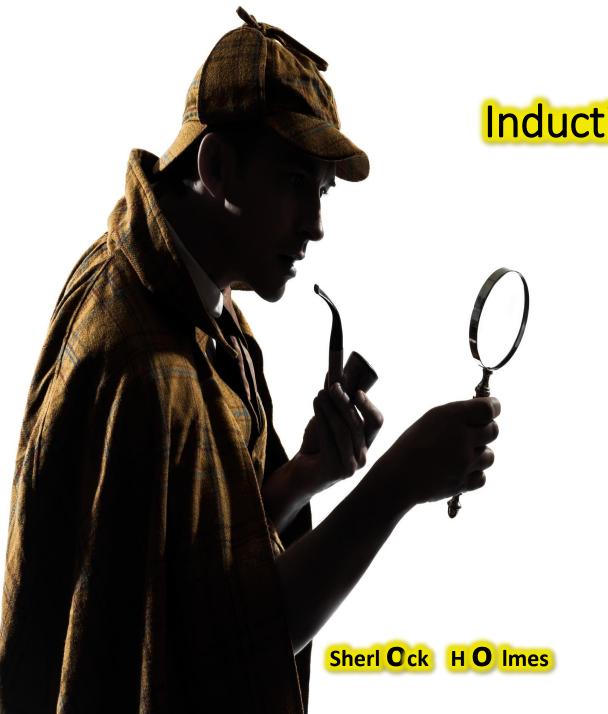
Edisi Kedua

Agensi

Reevany Bustami Eleesya Nasruddin Norman Blaikie

3





The Story of Inductive Research Strategy

& P Ositivism



Ontological

- 1. Ordered universe made up of discrete and observable events
- 2. Order represented by generalisations about relationships between concepts

Inductive

Research

Strategy

3. Primacy of Observation

4. View of social reality: complex of (causal) relations between events

5. Causes of human behaviors external to individual: Externality

Ontologi

- 1. Alam yang tersusun
- 2. Alam yang mempunyai kejadian/ peristiwa berasingan yang boleh/bisa diperhatikan
- 3. Ketersusunan alam boleh/bisa digambarkan dengan generalisasi tentang hubungan antara konsep
- 4. Primasi Observasi / Pemerhatian/Pengamatan -Hanya perkara-perkara yang boleh/bisa diperhatikan/diamati dianggap benar
- Realiti sosial dianggap terdiri daripada hubungan sebabakibat yang kompleks di antara kejadian – penyebab luaran

Epistemologi

- Ilmu dihasilkan melalui penggunaan deria / pancaindera, dengan ujikaji dan analisis perbandingan. Deria/panca indera menghasilkan data. Realiti sosial dianggap dapat dicatatkan secara langsung
- Konsep/konstruksi dan generalisasi tentang hubungan di antara konsep – konsep dianggap sebagai ringkasan tentang sesuatu realitas
- Data Objektif dihasilkan melalui prosedur pemerhatian/pengamatan Objektif
- 4. Pernyataan tentang pola dan keteraturan (regularities) menjadi pernyataan teoretis tentang realitas

Epistemological



- 1. Knowledge produced through use of human senses
- 2. Concepts & generalisations describe reality

Inductive Research Strategy

3. Objectivity:

Objective observation procedures

4. Recorded regularities become theoretical statements about patterns in reality







Inductive RS: 4 Key General Steps

Observation / **Data Collection** Analysis Generalization / Conclusions Law (if the conclusions from observation is sufficient)

Inductive Research Strategy...

1. Objective knowledge

2. Data collection

3. Data analysis

4. Pattern explanation

5. Generalizations

6. (Laws of reality) e.g. Law of supply

& demand just like law of gravity

"Eventually, we can possibly understand the universe and know 'God's thoughts'





Ontological

- 1. Ordered universe made up of discrete and observable events
- 2. Order represented by generalisations about relationships between concepts

Deductive

Research

Strategy

- 3. Only observable objects are accepted as scientific objects
 - 4. View of social reality: complex of causal relations between events

5. Causes of human behaviour external to individual

Ontologi

- 1. Alam yang tersusun/ teratur.
- Alam yang mempunyai/ berisi kejadian berasingan/ terpisah yang boleh / bisa diperhatikan
- Ketersusunan alam boleh/bisa digambarkan dengan generalisasi tentang hubungan antara konsep
- Hanya yang boleh/bisa diperhatikan dianggap / diterima sebagai objek penelitian sains.
- 5. Realiti sosial dianggap terdiri daripada hubungan sebabakibat yang kompleks di antara kejadian



Epistemologi

- 1.llmu dihasilkan melalui pengamatan/pemerhatian bergantung kepada teori – observasi bukanlah raja!
- 2. Peneliti hanya boleh/bisa melihat berdasarkan bahasa/konsep dan kaca mata mereka. (hijau – biru) acsot->
- 3. Penggunaan deria/panca indera ditolak krn tidak selamat/aman untuk dijadikan asas teori -teori saintifik
- 4.Semua Ilmu bersifat SEMENTARA dan harus melalui proses Evaluasi / Penilaian Kritikal

Epistemological

 Knowledge produced through observations dependent on theories – observation is not king

Deductive Research Strategy 2. Researchers can only observe based on the 'language'/'concepts' and the 'lenses' that they have

3. All knowledge is tentative and subject to ongoing

cri Tical evaluation



DeducTive &

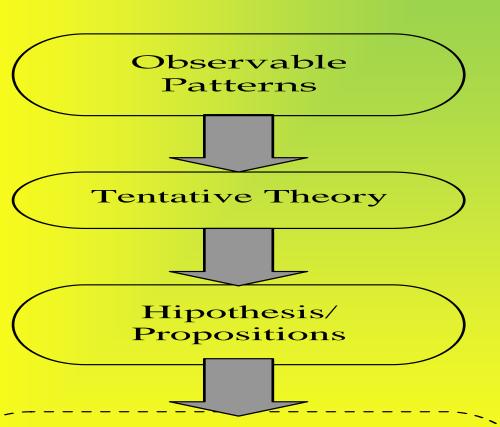
Critical Ra Tionalism

- Referred to as Post-Positivism
- All observations are considered to be dependent on theory and observations exist within a 'horizon of expectations'
 - Theories are boldly put forward for trial, to be eliminated if they clash with observations
 - Task of social scientist: To challenge (and be critical towards) dogmatic thinking and disprove any

false theory - Principle of



Deduc Tive RS: 4 Key Steps



Tests (if there is confirmation from observation, then theory is supported (tentatively); if not theory is rejected

Critical testing process



Deduc Tive research strategy...

ESSENCES

1. Hypoteses from a theory

2. Data collection

3. Test fails: theory is false

4. Test succeeds: theory is

Critical testing corroborated process

but not proven to be true

...5.Combined (contesting) hypotheses can lead to 'new-theorizing' "you can only come closer, closer to the

Total Truth"



Defining Content Analysis

- 1. A research method
- To examine various types of content: Text, Audio, Visual (images/ movies)
- 3. To produce systematic analysis: Frequencies, Percentages, Themes, Trends/ Trajectories, Commonalities and Contrasts
- Mainly classified as Qualitative method (but sometimes labelled as 'quantitative' – can contain frequencies, percentages)
- 5. Commonly used to analyze 'obvious' data (media postings, photos, policy statements, books) that are mainly visible / explicit.
- 6. Can be used in all four research strategies: Inductive, Deductive, Abductive, Retroductive
- 7. Generally, can be done indoor (not necessary to be in the field)



Inductive RS: 4 Key General Steps

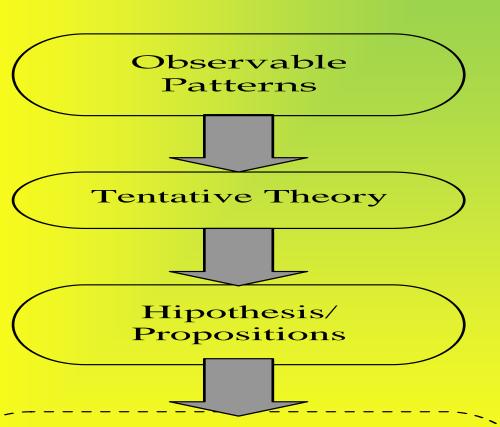
Observation / Data Collection **Analysis** Generalization / Conclusions Law (if the conclusions from observation is sufficient)



10 Steps of Inductive Research in Content Analysis

- . Research Questions
- 2. Research Strategies
- 3. Designing the sample: Sampling and Logical Rationale + Specific corpus as the sample
- **4. Collecting data** / contents and Texts? Images Visual? Others e.g. audio (tones)? (if necessary) Transcribing the content
- **5. Content Coding** (often regarded as optional) Looking at the **different dimensions** or units of data and labelling them e.g. text/ paragraphs/ a posting, visual/images, audio
- **6. Descriptive Coding** / Open Coding / Initial Coding / Exploratory Coding (note Inductive logic uses researcher's eyes to describe): **Producing Concepts / Labels**
- 7. Pattern Coding / Categories formation / Axial Coding / Thematic Coding /
 - (i) Coding to find **connections** between codes (concepts)
 - (ii) Similar Connections of codes lead to a **theme/category**, Different connections lead to another theme/category
 - (iii) The outcome is a pattern of connections
- 8. Conceptual Coding / Theoretical Coding (commonly associated with Grounded theory) but relevant to a more Advanced content analysis. The **themes** produced from pattern coding are further **integrated** and analysed to create **overarching / underlying concepts** that **significantly explain** the data.
- **9.** Theoretical Coding (commonly associated with Grounded theory) but relevant to a more Advanced content analysis. (Note in inductive logic, researcher plays a role).
- **10. Theory-building**: Theoretical Coding leads to a process of **Theorizing**. The overall findings from pattern coding/ conceptual coding are **explained within** a context of a **theory** or **theoretical framework**. Hence groups of data are explained as theoretical constructs.

Deduc Tive RS: 4 Key Steps



Tests (if there is confirmation from observation, then theory is supported (tentatively); if not theory is rejected

Critical testing process



10 Steps of Deductive Research in Content Analysis

- 1. Research Questions
- 2. Research Strategies
- 3. Theory Hypotheses
- 4. Hypothesis-generated Coding categories (& Hypotheses to test) Tests? Frequencies? Trajectories/Trends? Connection? between the coding categories
- 5. Designing the sample: Sampling and Logical Rationale + Specific corpus as the sample
- **6. Collecting data** / contents and Transcribing (if necessary) Texts? Visual? Others e.g. audio (tones)?
- 7. Level 1 Coding ESSENCE: Search and capture the relevant data/content → Using Coding categories to S&C
- 8. Level 2 Coding: **ESSENCE: Rescue the silent data.** Reexamine the content to identify **other data that have not been included** in the coding categories.
- 9. Explanation Phase 1:
 - (i) Classify and Integrate the findings from Level 1 Coding (and Level 2 Coding).
 - (ii) Interpret the findings and **connect** to the hypotheses/theory.

10. Explanation Phase 2:

- (i) Explain the ways the findings and analysis contribute to knowledge advancement
- (ii) Confirm, extend, challenge, debunk, create, transform a theory/ conceptual framework/findings



National Education Blueprint (NEB) in Malaysia

Example From ChatGPT:

- Create Coding Categories
- Develop a coding scheme based on key themes and objectives of the NEB:
- Quality of education (e.g., curriculum development, teacher training)
- Access to education (e.g., enrollment rates, inclusive education)
- Equity in education (e.g., addressing disparities based on socio-economic status, ethnicity)
- Integration of technology in education (e.g., digital literacy, e-learning platforms)
- Policy implementation strategies (e.g., funding allocation, monitoring and evaluation mechanisms)

Coding

- Apply the coding scheme systematically to the NEB documents. This can be done manually or using software for content analysis.

Interpretation

- Analyze the coded data to identify key priorities and strategies within the NEB:
- Frequency and emphasis on each coding category across different sections of the NEB.
- Relationships between different themes and strategies outlined in the blueprint.
- Alignment of NEB goals with broader educational reform objectives in Malaysia.

National Education Blueprint (NEB) in Malaysia (Cont...)

Report Findings: (from ChatGPT)

Example Outcome of the Analysis:

- After analyzing the National Education Blueprint (NEB) documents, the following findings were observed:
- 1. **Quality of Education**: 40% of the NEB content focuses on improving the quality of education, with strategies including curriculum reform (15%), enhancing teacher training and professional development (20%), and promoting innovation in teaching methodologies (5%).
- 2. **Access to Education**: 30% of the NEB addresses access to education, with goals to increase enrollment rates (10%), improve infrastructure for schools in rural and underserved areas (15%), and enhance educational opportunities for marginalized groups (5%).
- 3. **Equity in Education**: 20% of the NEB emphasizes equity in education, aiming to reduce disparities based on socio-economic status (10%), ethnicity (5%), and geographical location (5%).

- 4. **Integration of Technology in Education**: 5% of the NEB discusses integrating technology in education, focusing on digital literacy programs (3%) and leveraging e-learning platforms for flexible learning environments (2%).
- 5. **Policy Implementation Strategies**: 5% of the NEB outlines specific policy implementation strategies such as funding allocations (3%) and establishing monitoring and evaluation mechanisms to track progress (2%).
- → **Implications**: The analysis indicates a comprehensive approach within the NEB to enhance the quality of education, improve access, and address equity issues in Malaysia's education system. There is notable emphasis on curriculum reform, teacher training, and expanding educational opportunities, particularly in underserved areas.
- **Conclusion**: Through content analysis of the National Education Blueprint (NEB), it is evident that Malaysia is prioritizing educational reforms aimed at enhancing quality, accessibility, and equity in education. Continued implementation of strategies outlined in the NEB could lead to significant improvements in Malaysia's education landscape, benefiting students and educators nationwide.

Content Analysis: Social Media Posts on Climate Change

From ChatGPT

Example of Content Analysis: Analyzing Social Media Posts on Climate Change

1. Define the Research Question:

- Research Question: How do social media users discuss climate change on Twitter?

2. Select the Content:

- **Data Source**: Twitter posts (tweets) containing hashtags related to climate change (#climatechange, #globalwarming, etc.).
- Time Period: January 1, 2023, to December 31, 2023.
- **Sample Size**: 500 tweets randomly selected from this period.

3. Prepare the Material:

- **Collect** and compile the 500 tweets into a dataset for analysis.

4. Create Coding Categories:

- Develop a **coding scheme** based on **common themes** related to climate change discussions:
- Mitigation efforts (e.g., reducing carbon emissions, renewable energy)
- Climate impacts (e.g., extreme weather events, sea-level rise)
- Policy and politics (e.g., government actions, international agreements)
- Public awareness and activism (e.g., protests, awareness campaigns)

5. Coding:

- Manually or using software, assign **appropriate codes** to each tweet based on the **coding scheme**.

6. Interpretation:

- **Analyze** the coded data to **identify patterns** and **themes**:
- **Frequency** of each code/category.
- **Relationships** between different categories (e.g., how often mitigation efforts are discussed in relation to climate impacts).
- **Emerging trends** or **shifts in discourse** over time (if analyzing across different months or years).

Content Analysis: Social Media Posts on Climate Change

Example Outcome of the Analysis:

- 1. After analyzing the 500 tweets, the following findings were observed:
- 2. **Mitigation Efforts**: 40% of tweets discussed various efforts to mitigate climate change, with the most common topics being renewable energy (15%) and carbon reduction strategies (25%).
- 3. **Climate Impacts**: 30% of tweets focused on the impacts of climate change, with discussions on extreme weather events (12%) and sea-level rise (18%) being prominent.
- 4. **Policy and Politics**: 20% of tweets discussed government policies and international agreements related to climate change, highlighting debates over effectiveness and implementation.
- **5.** **Public Awareness and Activism**: 10% of tweets addressed public awareness campaigns and activism efforts, including mentions of protests (5%) and educational initiatives (5%).

→**Implications**:

- The analysis indicates a **strong emphasis on mitigation strategies** and discussions about climate impacts on Twitter.
- → However, public awareness and activism topics were relatively less discussed compared to other themes.
- →This suggests a potential gap in public engagement or interest in activism on social media platforms.
- **Conclusion**: Through content analysis of Twitter posts, it is evident that while there is substantial discourse on mitigation efforts and climate impacts, there may be opportunities to amplify discussions around public awareness and activism to foster greater engagement and action on climate change.

Foreign policy on migrant workers: Comparing United States and Canada using Content Analysis

- From ChatGPT (example):
- To compare and contrast the foreign policy on migrant workers between the United States and Canada using content analysis, we would examine official documents, speeches, policy statements, and legislative actions pertaining to migrant workers from each country.
- Here's how we might structure and present the results based on hypothetical findings:

- Step 1: Data Collection
- Gather relevant documents and sources such as government speeches, policy statements, legislative texts, and reports from both the United States and Canada related to migrant workers.
- This could include documents from government websites, international organizations, and scholarly articles.

Coding Categories: Develop coding categories based on recurring themes and topics that emerge from the documents. Example categories could include:

- 1. Labor Rights and Protections: Policies aimed at ensuring fair treatment, wages, and working conditions for migrant workers.
- 2. Immigration Policies: Laws and regulations governing the entry, stay, and rights of migrant workers.
- 3. Social Integration and Services: Programs and initiatives aimed at integrating migrant workers into society and providing social services.

- 4. Economic Contributions:
 Policies addressing the economic impact of migrant workers and their role in national economies.
- 5. Human Rights and Legal Protections: Measures to protect the rights and freedoms of migrant workers under international law.
- Coding Process: Code each document according to these categories. Count the frequency of each code to determine the prominence of different themes within each country's foreign policy on migrant workers.

Step 3: Calculation and Presentation

After coding, calculate frequencies and percentages for each category to compare and contrast the foreign policy approaches between the United States and Canada. Hypothetical Results and Presentation Example:

United States:

- 1. Labor Rights and Protections: 30% of documents emphasize labor rights and protections for migrant workers, focusing on minimum wage laws and workplace safety.
- 2. Immigration Policies: 25% of documents discuss immigration policies affecting migrant workers, including visa regulations and border enforcement.
- **3. Social Integration and Services**: 15% of documents highlight programs for social integration, such as language training and community support.
- **4. Economic Contributions**: 20% of documents address the economic contributions of migrant workers to sectors like agriculture and hospitality.
- 5. Human Rights and Legal Protections: 10% of documents cover human rights protections, particularly regarding access to legal representation and due process.

Canada:

- 1. Labor Rights and Protections: 35% of documents emphasize labor rights and protections, with strong legislative frameworks for fair wages and working conditions.
- 2. Immigration Policies: 20% of documents discuss immigration policies, focusing on pathways to permanent residency and family reunification.
- 3. Social Integration and Services: 25% of documents highlight comprehensive social integration programs, including healthcare and educational support.
- 4. Economic Contributions: 15% of documents address the economic contributions of migrant workers, particularly in industries like technology and healthcare.
- 5. Human Rights and Legal Protections: 5% of documents cover human rights protections, emphasizing equality under the law and antidiscrimination measures.

Comparison and Contrast:

- Labor Rights and Protections: Both countries prioritize labor rights, but Canada appears to have a slightly stronger emphasis on legal protections and working conditions.
- Immigration Policies: The United States focuses more on enforcement and border control, whereas Canada emphasizes pathways to permanent residency and family reunification.
- Social Integration and Services: Canada provides more extensive social integration programs compared to the United States.
- **Economic Contributions**: Both recognize the economic contributions of migrant workers, but Canada emphasizes high-skilled sectors more prominently.
- Human Rights and Legal Protections:
 Canada places a stronger emphasis on human rights protections compared to the United States.

Conclusion:

- Through content analysis, it becomes clear that while both the United States and Canada address similar themes in their foreign policies on migrant workers, there are notable differences in emphasis and approach.
- Canada tends to prioritize social integration and comprehensive rights protections, while the United States places more emphasis on immigration enforcement and economic contributions.
- These findings highlight the distinct policy priorities and values shaping each country's approach to managing migrant labor.



Social Science Research Methodology

uku Islamic Social Science Research Methodology ini merupakan salah Satu bentuk kerjasama antara CenPRIS (Centre for Policy Research and International Studies) Universiti Sains Malaysia dengan Program Studi Sosiologi FISIP Universitas Muhammadiyah Malang. Buku ini menyajikan pembahasan tentang metodologi penelitian sosial yang mengombinasikan paradigma penelitian sosial dengan tradisi Islam. Lebih lanjut, metodologi penelitian dalam buku ini dijelaskan melalui pendekatan empat strategi penelitian, yaitu Induktif, Deduktif, Abduktif dan Retroduktif.

Penjelasan mengenai metodologi penelitian dijelaskan secara runtut dari proses pembentukan ilmu pengetahuan, paradigma dalam ilmu pengetahuan, ulasan mendalam mengenai empat strategi penelitian, hingga contoh penerapannya. Tidak hanya itu, buku ini dilengkapi dengan pandangan-pandangan mengenai paradigma, diskursus, tradisi penelitian dan pengetahuan berdasarkan perspektif Islam yang bersumber dari Al-Qur'an serta Hadits. Pandangan-pandangan dari ilmuwan-ilmuwan muslim juga turut mewarnai isi buku ini.

Penjelasan mengenai metodologi penelitian dari pendekatan 4 strategi penelitian menjadi semakin lengkap dengan contoh-contoh artikel di bagian akhirnya. Kombinasi yang apik ini dapat memudahkan pembaca untuk memahami isi buku baik secara teori maupun praktik.



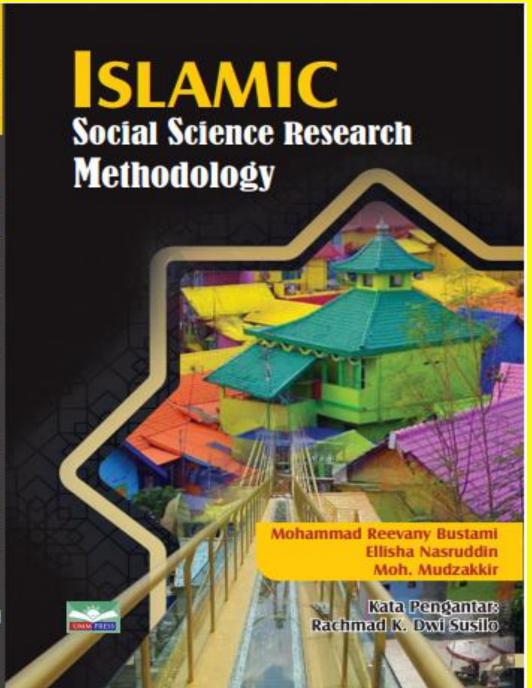


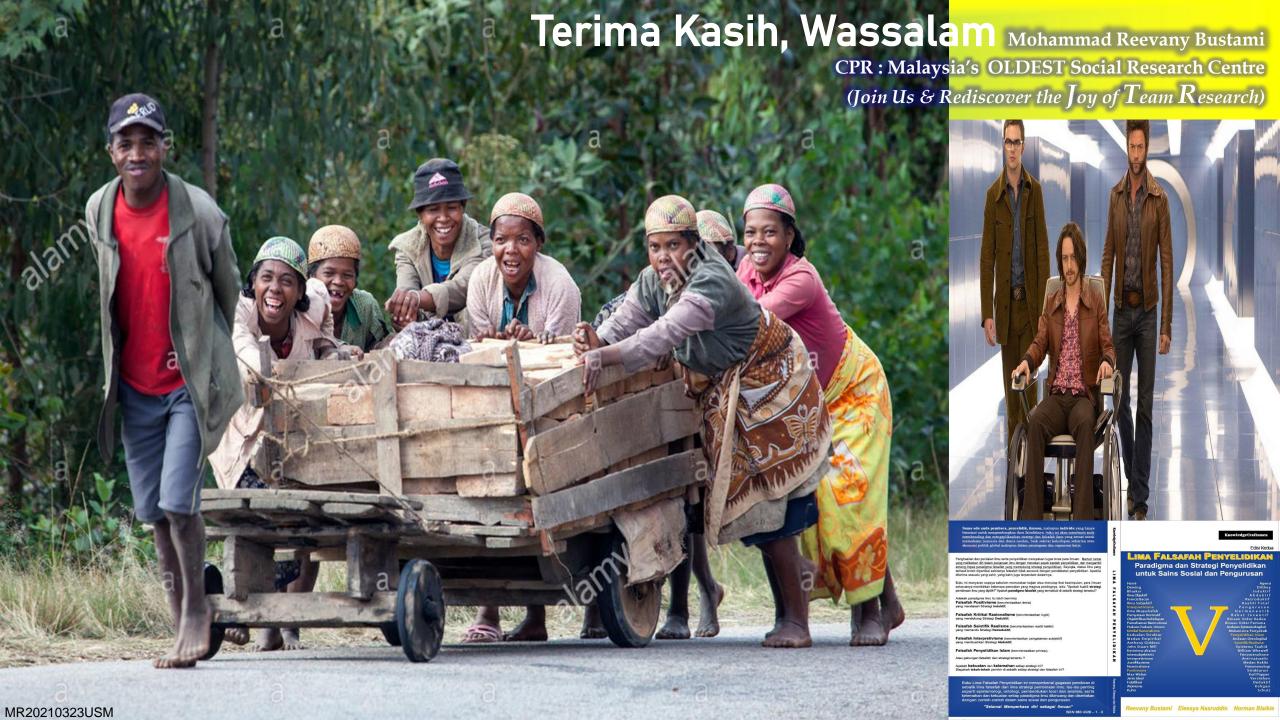






Kritik dan saran mengesai buku ini via emali: ummaress@gmail.com





References

- Lima Falsafah Penyelidikan, by Reevany, Eleesya and Blaikie (2004)
- Approaches to social enquiry by Blaikie, N. (1993)
- Designing social research by Blaikie, N. (2000)