



# Qualitative Data Analysis Using NVivo in IKN Megaproject Research

## *Thematic Analysis*

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*For Doctoral student in Psychology*

# Research Context

- Complexity of megaproject IKN management
- Necessity of mixed methods for holistic insight
- Qualitative data reveals coordination, risk, and governance dynamics

# Advantages of Thematic Analysis (Braun & Clarke, 2008)

- 1 Flexibility.**
- 2 Relatively easy and quick method to learn, and do.
- 3 Accessible to researchers with little or no experience of qualitative research.
- 4 results are generally accessible to educated general public.
- 5 Useful method for working within participatory research paradigm, with participants as collaborators.
- 6 **Can usefully summarize key features of a large body of data, and/or offer a 'thick description' of the data set.**
- 7 Can highlight similarities and differences across the data set.
- 8 Can generate unanticipated insights.
- 9 Allows for social as well as psychological interpretations of data.
- 10 Can be useful for producing qualitative analyses suited to informing policy development

Ensuring that the results of this qualitative research are not only credible, but also able to provide an in-depth and contextual picture to support the management model of the IKN megaproject program.



# Interview Questions (in Context)

The connection between problem definition, variables studied, and interview questions for gathering qualitative data.

To align research problems with qualitative tools, clearly link problem statements, variables, and interview questions to ensure relevance and support research goals and analysis.

Variabel Terkait	Pertanyaan Wawancara Semi-Terstruktur
- Koordinasi - Manajemen risiko	<p>Q1. Kompleksitas Koordinasi Multientitas → Bagaimana Anda menilai koordinasi antarentitas dalam megaproyek IKN, serta tantangan utama dan upaya yang dilakukan untuk mencegah tumpang tindih tugas dan miskomunikasi?</p> <p>Q2. Birokrasi dan Regulasi → Bagaimana Anda menilai efektivitas regulasi dalam mendukung proyek IKN, dan apa upaya yang dilakukan untuk menyederhanakan birokrasi tanpa melanggar peraturan?</p>
- Manajemen program - Project Performance (Waktu & Biaya)	<p>Q3. Pengelolaan Waktu dan Biaya → Apakah proyek IKN mengalami keterlambatan atau pembengkakan biaya? Jika ya, bagaimana langkah mitigasi dilakukan untuk menekan dampak keterlambatan dan pembengkakan anggaran?</p> <p>Q4. Model Manajemen Program → Sejauh mana model manajemen program di IKN membantu mengatasi masalah waktu dan biaya, serta mendukung kolaborasi antarentitas dalam pengambilan keputusan?</p>
- Manajemen program (Mediator)	<p>Q5. Tantangan dan Rekomendasi → Apa tantangan terbesar dalam penerapan manajemen program IKN, dan apa rekomendasi Anda untuk meningkatkan integrasi koordinasi, pelacakan manfaat, alokasi sumber daya, serta pengelolaan risiko agar kinerja proyek lebih optimal?</p>
- Sustainability - Adaptive Model - Innovation	<p>Q6. Tantangan Lingkungan dan Keberlanjutan → Bagaimana proyek IKN menangani tantangan lingkungan dan memastikan keberlanjutan ekosistem, termasuk penerapan teknologi ramah lingkungan?</p> <p>Q7. Pengelolaan Teknologi dan Inovasi → Apa tantangan utama dalam penerapan teknologi untuk konsep kota pintar di IKN, dan bagaimana risiko serta biaya pemeliharaan dikelola agar model program tetap adaptif?</p>

## Why NVivo?

Handles large volumes of narrative data efficiently

Systematic coding: open, axial, selective

Enhances transparency, auditability, and consistency

Superior to manual coding for large-scale qualitative data

# Comparison of Analytical Techniques



Feature / Criterion	NVivo 15	ATLAS.ti	MAXQDA	Manual Coding
Data Volume Handling	Efficient for large narrative data	Good for medium to large datasets	Robust for mixed data types	Limited by researcher capacity
Coding Techniques	Open, axial, selective coding support	Similar coding methods	Comprehensive coding methods	Manual, time-consuming
Transparency & Audit Trail	Full audit trail, traceable coding	Audit trail available	Audit trail and memos	Difficult to maintain
Pattern Recognition	Advanced query and visualization tools	Good visualization features	Strong visual and mapping tools	Manual pattern identification
Integration with Quantitative Analysis	Supports data export and triangulation with tools like SmartPLS	Limited direct integration	Some integration capability	Not applicable
User Interface & Learning Curve	User-friendly but feature-rich, moderate learning curve	Slightly complex UI	Intuitive interface, easier learning	N/A
Collaboration & Data Sharing	Supports multi-user projects, cloud options	Collaboration possible	Collaborative features	Manual sharing challenges
Bias Reduction	Reduces subjective bias via systematic coding	Subject to coder bias	Helps reduce bias with systematic coding	High risk of subjective bias
Suitability for Megaprojects	Ideal for complex, multi-stakeholder projects like IKN	Suitable but less specialized	Suitable for diverse projects	Not practical

# Preparation Stage

Designing semi-structured interview guides aligned with research questions

Selecting purposive and criterion-based informed participants

Recording and verbatim transcription for accuracy

Data import into NVivo for analysis

# Data Organization in NVivo

Import transcripts and organize by source

Use of nodes to represent codes/themes

Establish hierarchical coding structure reflecting research focus

# Coding Process

## OPEN CODING

- ❑ Initial line-by-line coding to identify meaningful units
- ❑ Generation of numerous preliminary codes
- ❑ Captures diverse perspectives and emerging ideas

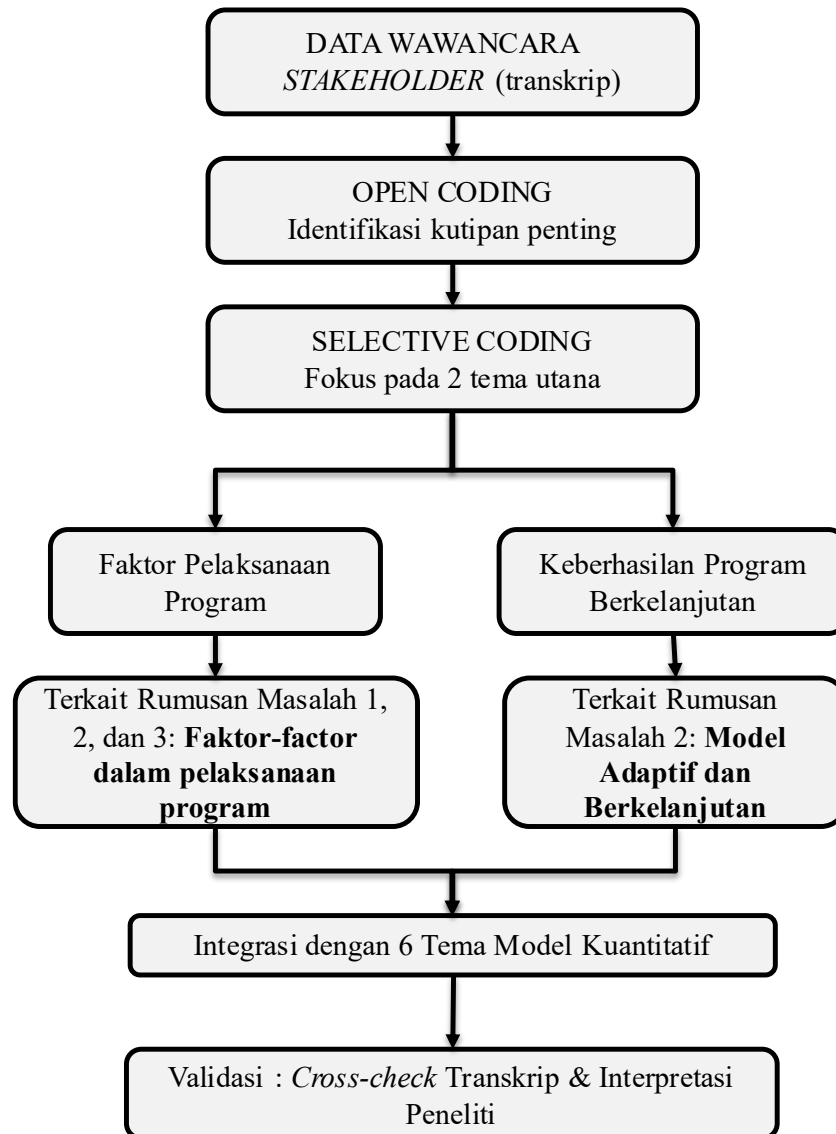
## AXIAL CODING

- ❑ Grouping codes into broader categories
- ❑ Exploring relationships among codes
- ❑ Identifying patterns and connections relevant to research questions

## Selective Coding and Theme Development

- ❑ Focusing on core categories that answer research objectives
- ❑ Refining themes into major analytical constructs
- ❑ Themes in this study:  
Program Implementation Factors & Sustainable Success

## Qualitative Analysis Flowchart



# Thematic Structure (in research context)

- Program Implementation: Benefit Tracking, Resource Allocation, Coordination, Risk Management
- Sustainable Success: Program Management Implementation, Project Performance



# Nvivo 15 Display

NVIVO Final Analysis

Quick Access

IMPORT

Data

- Files
- File Classifications
- Externals

ORGANIZE

Coding

- Codes
- Sentiment
- Relationships
- Relationship Types

Cases

Notes

Sets

EXPLORE

- Queries
  - Query Criteria
  - Query Results
  - Coding Matrices
- Visualizations
  - Maps

File Home Import Create Explore Share Modules

Clipboard Item Organize Query Visualize Code Autocode Range Code Uncode Case Classification File Classification Workspace AI Assistant

Files

Name	Codes	References	Modified on	Modified by
R1-CK-IPAL-MK_20241028 162331	20	41	20/05/2025 12:18	RD
R2-PR-PORBIN-KON_20241028 172315	19	41	23/05/2025 08:00	RD
R3-BM-JALAN AKSES-MK_20241029 131441	18	41	20/05/2025 12:18	RD
R11-SDS-DAS1-KON_20241031 160446	17	37	22/05/2025 13:26	RD
R6-CK-PENATAANSUMBU-PPK_20241030 104519	24	57	23/05/2025 07:57	RD
R14-CK-KEMENKO3-KON_20241101 111023	34	101	22/05/2025 13:26	RD
R7-PR-RTJM1-MK_20241031	29	85	22/05/2025 14:28	RD
R9-CK-LANDSKAP-MK_20241031 115658	15	25	22/05/2025 14:38	RD
R15-CK-KEMENKO3-PPK_20241101 100636	21	73	22/05/2025 13:26	RD
R4-CK-MASJID1-KON	12	25	22/05/2025 13:38	RD
R8-PR-RTJM2-PPK	23	57	22/05/2025 14:25	RD
R12-SDS-DAS2-PPK	24	89	22/05/2025 18:07	RD
R13-CK-KEMENKO3-MK	33	101	22/05/2025 15:34	RD
R10-PR-PSSI-MK	23	65	22/05/2025 17:06	RD
R5-CK-MASJID2-MK	15	29	22/05/2025 16:39	RD

Imported transcript documents, from the results of the interview

# Nvivo 15 Display

**NVIVO**  
Final Analysis

➤ Quick Access

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  - Query Criteria
  - Query Results
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Name	Files	References	Created on	Created by	Modified on	Modified by
Model Manajemen Program Megaproyek	15	213	19/05/2025 19:05	RD	21/05/2025 08:14	RD
<ul style="list-style-type: none"> <li>Faktor Pelaksanaan Program                             <ul style="list-style-type: none"> <li>1 Pelacakan Manfaat                                     <ul style="list-style-type: none"> <li>Belajar dari Proyek Sebelumnya</li> <li>Efektivitas Pemantauan dan Monitorin</li> <li>Penilaian Kebermanfaatn Program</li> <li>Proyeksi Manfaat terhadap Stakeholde</li> </ul> </li> <li>2 Alokasi Sumber Daya                                     <ul style="list-style-type: none"> <li>Distribusi Material dan Tenaga</li> <li>Keterbatasan SDM, Material, atau Pera</li> <li>Optimalisasi Penggunaan Dana</li> <li>Strategi Efisiensi Biaya</li> </ul> </li> <li>3 Koordinasi                                     <ul style="list-style-type: none"> <li>Durasi Rapat Panjang</li> <li>Efektifitas Koordinasi</li> </ul> </li> </ul> </li> </ul>	15	144	19/05/2025 18:5	RD	21/05/2025 08:14	RD
<ul style="list-style-type: none"> <li>1 Pelacakan Manfaat                             <ul style="list-style-type: none"> <li>Belajar dari Proyek Sebelumnya</li> <li>Efektivitas Pemantauan dan Monitorin</li> <li>Penilaian Kebermanfaatn Program</li> <li>Proyeksi Manfaat terhadap Stakeholde</li> </ul> </li> <li>2 Alokasi Sumber Daya                             <ul style="list-style-type: none"> <li>Distribusi Material dan Tenaga</li> <li>Keterbatasan SDM, Material, atau Pera</li> <li>Optimalisasi Penggunaan Dana</li> <li>Strategi Efisiensi Biaya</li> </ul> </li> <li>3 Koordinasi                             <ul style="list-style-type: none"> <li>Durasi Rapat Panjang</li> <li>Efektifitas Koordinasi</li> </ul> </li> </ul>	10	16	19/05/2025 18:15	RD	21/05/2025 08:14	RD
<ul style="list-style-type: none"> <li>Belajar dari Proyek Sebelumnya</li> <li>Efektivitas Pemantauan dan Monitorin</li> <li>Penilaian Kebermanfaatn Program</li> <li>Proyeksi Manfaat terhadap Stakeholde</li> </ul>	2	2	19/05/2025 18:20	RD	21/05/2025 08:14	RD
<ul style="list-style-type: none"> <li>Efektivitas Pemantauan dan Monitorin</li> <li>Penilaian Kebermanfaatn Program</li> <li>Proyeksi Manfaat terhadap Stakeholde</li> </ul>	4	4	19/05/2025 18:21	RD	22/05/2025 17:51	RD
<ul style="list-style-type: none"> <li>Penilaian Kebermanfaatn Program</li> <li>Proyeksi Manfaat terhadap Stakeholde</li> </ul>	6	6	19/05/2025 18:21	RD	22/05/2025 17:58	RD
<ul style="list-style-type: none"> <li>Proyeksi Manfaat terhadap Stakeholde</li> </ul>	4	4	19/05/2025 18:22	RD	22/05/2025 17:59	RD
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<ul style="list-style-type: none"> <li>Distribusi Material dan Tenaga</li> <li>Keterbatasan SDM, Material, atau Pera</li> <li>Optimalisasi Penggunaan Dana</li> <li>Strategi Efisiensi Biaya</li> </ul>	7	7	19/05/2025 18:24	RD	22/05/2025 14:52	RD
<ul style="list-style-type: none"> <li>Keterbatasan SDM, Material, atau Pera</li> <li>Optimalisasi Penggunaan Dana</li> <li>Strategi Efisiensi Biaya</li> </ul>	9	9	19/05/2025 18:22	RD	22/05/2025 14:52	RD
<ul style="list-style-type: none"> <li>Optimalisasi Penggunaan Dana</li> <li>Strategi Efisiensi Biaya</li> </ul>	2	2	19/05/2025 18:25	RD	22/05/2025 14:27	RD
<ul style="list-style-type: none"> <li>Strategi Efisiensi Biaya</li> </ul>	4	4	19/05/2025 18:24	RD	22/05/2025 14:53	RD
<ul style="list-style-type: none"> <li>3 Koordinasi                             <ul style="list-style-type: none"> <li>Durasi Rapat Panjang</li> <li>Efektifitas Koordinasi</li> </ul> </li> </ul>	15	59	19/05/2025 18:16	RD	22/05/2025 17:55	RD
<ul style="list-style-type: none"> <li>Durasi Rapat Panjang</li> <li>Efektifitas Koordinasi</li> </ul>	2	2	20/05/2025 14:42	RD	22/05/2025 17:55	RD
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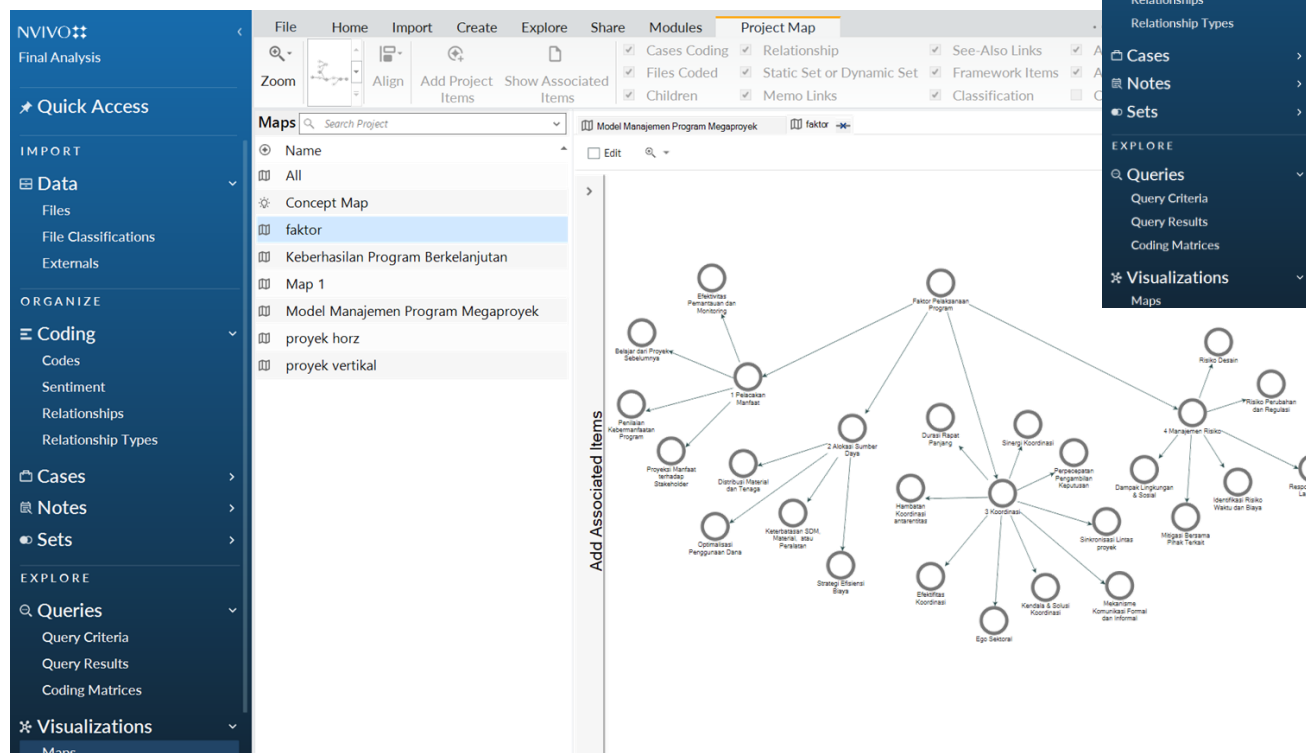
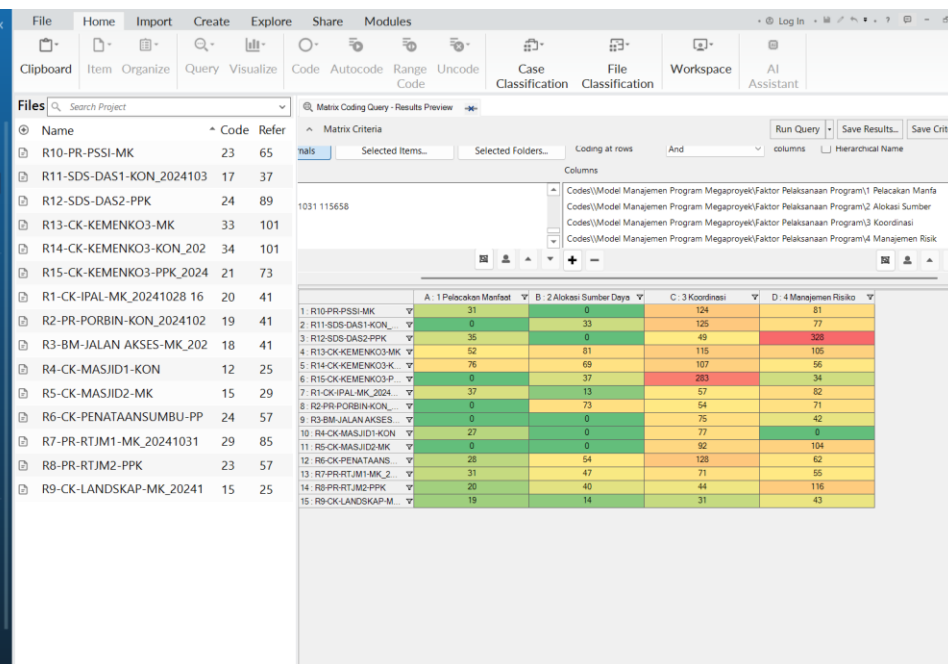
**SELECTIVE CODE**

**AXIAL CODE**

**OPEN CODE**

# Visualization Tools in NVivo

- ❑ Coding trees to display code hierarchy
- ❑ Word frequency and cluster analysis
- ❑ Heatmaps to show theme prominence across informants

	A: 1 Pelacakan Manfaat	B: 2 Alokasi Sumber Daya	C: 3 Koordinasi	D: 4 Manajemen Risiko
1: R10-PR-PSSI-MK	31	0	124	81
2: R11-SDS-DAS1-KON...	0	33	125	77
3: R12-SDS-DAS2-PPK	35	0	49	328
4: R13-CK-KEMENKO3-MK	52	0	115	105
5: R14-CK-KEMENKO3-K...	76	69	107	56
6: R15-CK-KEMENKO3-P...	0	37	263	38
7: R1-CK-IPALMK_2024	37	13	57	82
8: R2-PR-PORBIN-KON...	0	73	54	71
9: R3-BM-JALAN AKSES...	0	0	75	42
10: R4-CK-MASJID1-KON...	27	0	77	0
11: R5-CK-MASJID2-MK	0	0	92	104
12: R6-CK-PENATAANS...	28	54	128	62
13: R7-PR-RTJBM-MK_2...	31	47	71	55
14: R8-PR-RTJM2-PPK	20	40	44	116
15: R9-CK-LANDSKAP-M...	19	14	31	43

# Quality Assurance in NVivo Analysis

- ❑ Following Braun & Clarke's 15-point thematic analysis criteria
- ❑ Transparency in coding decisions
- ❑ Audit trail for replication and validation
- ❑ Credibility checking with informants

Process	No	Criteria
Transcription	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for 'accuracy'.
Coding	2	Each data item has been given equal attention in the coding process.
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been through, inclusive and comprehensive.
	4	All relevant extracts for all each theme have been collated
	5	themes have been checked against each other and back to the original data set.
	6	Themes are internally coherent, consistent, and distinctive.

Process	No	Criteria
Analysis	7	Data have been analysed - interpreted, made sense of - rather than just paraphrased or described.
	8	Analysis and data match each other - the extracts illustrate the analytic claims.
	9	Analysis tells a convincing and well-organized story about the data topic.
	10	A good balance between analytic narrative and illustrative extracts is provided.
Overall	11	Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it once-over-lightly.
Written report	12	The assumptions about, and specific approach to, thematic analysis are clearly explicated.
	13	There is a good fit between what you claim you do, and what you show you have done - ie, described method and reported analysis are consistent.
	14	The language and concepts use in the report are consistent with epistemological position oh the analysis.
	15	The researcher is positioned as active in the research process; themes do not just 'emerge'.

## Practical Implications

- NVivo-derived insights inform adaptive program management models
- Addressing coordination and resource allocation improves project outcomes
- Emphasizing benefit tracking for sustainability in megaproject

## Lessons Learned from NVivo Usage

- Importance of systematic data organization
- Value of iterative coding and theme refinement
- Necessity of integrating qualitative depth with quantitative breadth

## Conclusion

- ☑ NVivo is essential for rigorous, transparent qualitative analysis
- ☑ Thematic findings enrich understanding of megaproject complexities
- ☑ Convergent mixed methods provide robust, actionable knowledge for program management



*Terima kasih*

# Example : Theme Analytical Psychology

Studi kasus dalam penelitian Mahasiswa S1 – Psikologi (*on progress*)

Kerangka teori *emotion-focused coping*, serta desain studi kasus terhadap subjek L (wanita dewasa awal korban pelecehan seksual oleh ayah kandung)

## Konteks Transkrip

- Subjek: **L (21 tahun, wanita dewasa awal, korban incest)**
- Fokus: ***Emotion-Focused Coping***
- Metode: **Wawancara mendalam semi-terstruktur**

## Contoh Transkrip Wawancara (Simulasi Data NVivo)

Pewawancara (P):

Sejak kejadian itu terjadi, bagaimana perasaan yang paling sering L rasakan sampai sekarang?

L (Subjek):

**“Perasaan yang paling sering muncul itu sebenarnya kosong. Bukan sedih, bukan marah... lebih seperti mati rasa. Dulu saya sering menangis, tapi lama-lama saya seperti mematikan perasaan itu supaya bisa tetap berfungsi. Kalau saya terlalu merasakan, rasanya saya bisa hancur.”**

(Indikasi: emotional suppression, emotional numbing, survival coping)

P Ketika L memilih untuk ‘mematikan perasaan’, apa yang L lakukan dalam kehidupan sehari-hari?

L **“Saya fokus ke hal-hal yang kelihatan normal, seperti kuliah, tugas, atau ngobrol sama teman. Saya berpura-pura semuanya baik-baik saja. Kalau saya sibuk, saya nggak harus mikir tentang apa yang terjadi di rumah.”**

(Indikasi: avoidance, distraction, emotional regulation)

P Mengapa L tidak pernah menceritakan ini kepada keluarga atau pihak lain?

L **“Saya takut. Saya takut tidak dipercaya. Ayah saya orang yang kelihatan baik di luar, dan ibu saya selalu membela dia. Kalau saya bicara, saya malah bisa dianggap pembuat masalah. Jadi saya memilih diam, karena diam itu lebih aman.”**

(Indikasi: appraisal bahwa situasi tidak dapat dikendalikan → emotion-focused coping)

P Bagaimana L memaknai posisi ayah dalam hidup L sekarang?

L **“Saya tidak menganggap dia sebagai ayah lagi. Kalau orang bertanya, saya bilang saya nggak punya ayah. Dengan begitu saya merasa lebih aman secara emosional. Seolah-olah saya memutus ikatan itu supaya dia tidak lagi punya kuasa atas saya.”**

(Indikasi: distancing, boundary-setting, self-protection)

## Tujuan Umum:

Memahami secara mendalam bagaimana wanita dewasa awal korban pelecehan seksual oleh ayah kandung menggunakan emotion-focused coping untuk menghadapi dan mengelola trauma hidupnya.

## Tujuan Khusus 1

Mengidentifikasi bentuk-bentuk emotion-focused coping yang digunakan oleh subjek.

## Indikator Nvivo:

Data akan dikode sebagai coping bila memuat:

Indikator	Contoh
Menekan emosi	“saya mematikan perasaan”
Menghindari ingatan	“saya sibuk supaya tidak ingat”
Reframing	“itu sudah terjadi”
Distancing	“saya tidak punya ayah”
Dukungan emosional	“saya cerita ke sahabat”
Pemrosesan emosi	“saya merasa rusak dan kuat”

## *Makna Metodologis:*

Setiap tujuan penelitian → dioperasionalkan menjadi node → diverifikasi oleh kutipan data → disintesis menjadi tema

# TABEL KESESUAIAN TUJUAN – PERTANYAAN – NODE – TEMA



Tujuan Penelitian	Pertanyaan Penelitian	Node NVivo (Parent → Child)	Tema (Thematic Network)
Memahami gambaran emotion-focused coping pada korban	Bagaimana gambaran emotion-focused coping pada wanita dewasa awal korban incest?	Emotional Suppression → emotional numbing, avoidance, silence	Emotional Self-Protection
		Cognitive Reappraisal → acceptance, reframing	Meaning-Making of Trauma
		Distancing from Perpetrator → “tidak punya ayah”, emotional boundary	Boundary-Making
		Seeking Emotional Support → sahabat, pasangan	Emotional Survival Support
		Emotional Processing → merasa rusak, merasa kuat	Meaning-Making of Trauma
Mengidentifikasi faktor yang memengaruhi coping	Faktor apa yang memengaruhi emotion-focused coping?	Perceived Lack of Control → takut tidak dipercaya, tidak ada perlindungan	Emotional Self-Protection
		Family Context → ibu membela ayah, pengabaian	Context of Trauma
		Power Imbalance → ayah sebagai pelaku	Trauma Structure
Menganalisis bagaimana coping membentuk fungsi hidup dewasa awal	Bagaimana coping memengaruhi keberlanjutan hidup dan identitas korban?	Identity Reconstruction → identitas tanpa ayah	Psychological Self-Reconstruction
		Emotional Boundaries → menjaga jarak	Psychological Self-Reconstruction
		Functional Survival → kuliah, relasi, bertahan	Functional Survival in Early Adulthood

# MAKNA ILMIAH TABEL KESESUAIAN

Tabel menunjukkan **rantai logis penelitian kualitatif**:

***Tujuan → Pertanyaan → Data → Node → Tema → Model Konseptual***

Sehingga penelitian ini:

- Tidak hanya naratif
- Tapi **terstruktur, dapat diaudit, dan konsisten secara teoretik**

Sesuai dengan prinsip *Creswell, Auerbach & Silverstein*, serta kerangka *Lazarus & Folkman* yang digunakan dalam proposal

# MODEL

MODEL KONSEPTUAL NVivo yang disusun langsung dari proposal penelitian dan hasil simulasi analisis kualitatif, dan dapat digunakan sebagai visual teoretik utama BAB IV (Model Tematik)



## Makna Model

Model ini menunjukkan bahwa:

- Pada korban incest, ***emotion-focused coping*** bukan kelemahan, tetapi sistem adaptif untuk tetap hidup ketika dunia tidak aman.

Ini sepenuhnya konsisten dengan:

- Lazarus & Folkman → coping saat stresor tak dapat dikendalikan
- Greenberg → emosi sebagai sumber transformasi
- Herman → trauma relasional menghancurkan identitas