ANALISIS DATA

DALAM PERSPEKTIF PENELITIAN KUANTITATIF DAN RND

ZAENAL ABIDIN

@ABUZAE

PROFILE

ID SINTA: 6723738
ID Scopus: 57209314459
ID Google Scholar: Zaenal Abidin (o80n-AwAAAAJ)
Publication:

1. How to Count Speed? Utilizing Android Applications to Support a Concept Attainment Model to Help Mathematical Thinking Skills (Scopus Q1 - First Author)
2. How to teach fraction for empowering student mathematics literacy: Definition, bibliometric, and application using digital module (Scopus Q1 - Co Author)
3. Android Application for Smart Diagnosis of Children with Disabilities and Its Correlation to Neuroscience: Definition, Literature Review with Bibliometric Analysis, and Experiments (Scopus Q1 - Co Author)
4. Computational Thinking with a Multi-literacy Model Using Interactive PowerPoint Media: An Experiment in Elementary Schools (Proceeding Scopus - First Author)

Award:

1. International Recognition from Youngsan University and KOICA South Korea as Educator for People with Disabilties 2025
2. Best Presenter in International Hybrid Curriculum in Universiti Malaya 2023
3. Best Presenter in 6th ICEE UPI 2023
4. Best Presenter in ICMSCE FMIPA UPI 2022
5. Best Presenter in 4th ICEE UPI 2021

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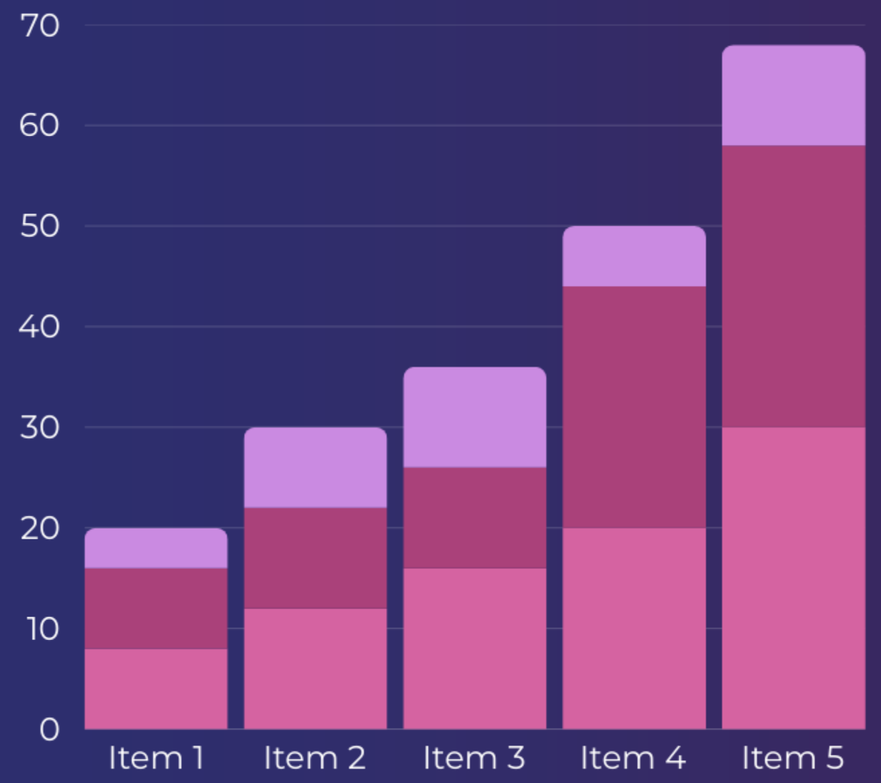
OUTLINE MATERI

- Penelitian kuantitatif
- Analisis Data Kuantitatif
- Research and Development
- Analisis Data dalam R&D

APA ITU PENELITIAN KUANTITATIF?

- Metode penelitian berbasis angka
- Data dianalisis secara statistik



CIRI-CIRI
PENELITIAN KUANTITATIF

- Objektif
- Sistematis
- Menggunakan instrumen pengukuran

TUJUAN
PENELITIAN KUANTITATIF

Menguji Teori

Mengukur Variabel

Memprediksi hubungan antar variabel

JENIS DATA KUANTITATIF

- Nominal
- Ordinal
- Interval
- Rasio

LANGKAH-LANGKAH
PENELITIAN KUANTITATIF

Identifikasi masalah

Interpretasi

Hipotesis

Analisis Data

Pengumpulan data

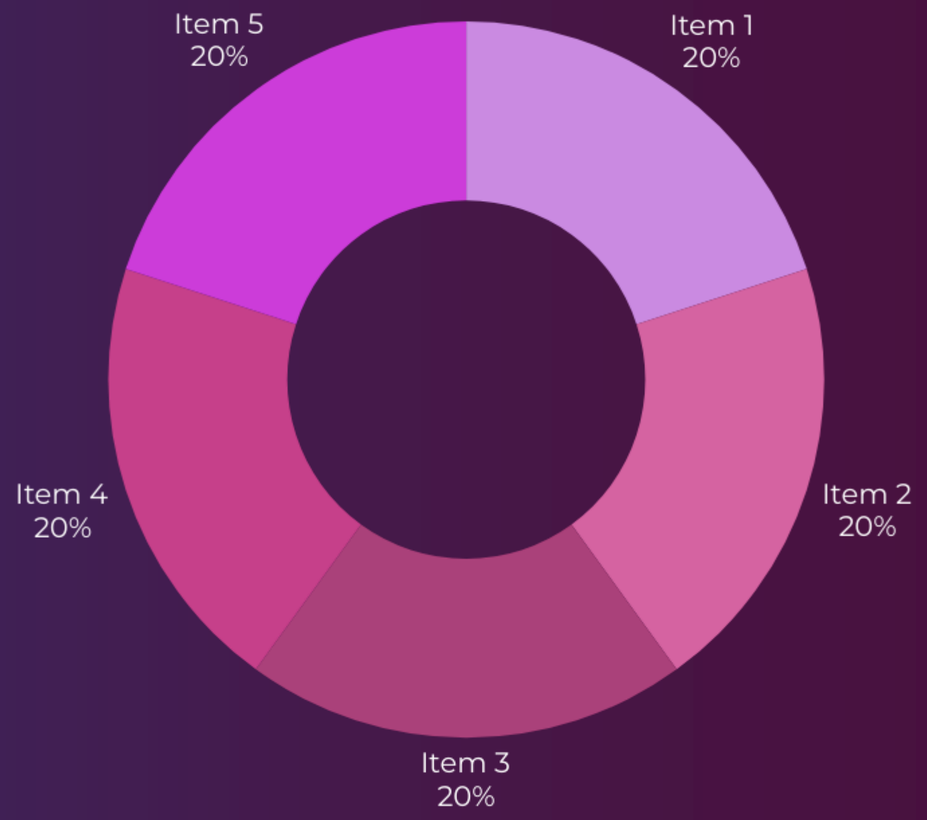
DEFINISI
ANALISIS DATA KUANTITATIF

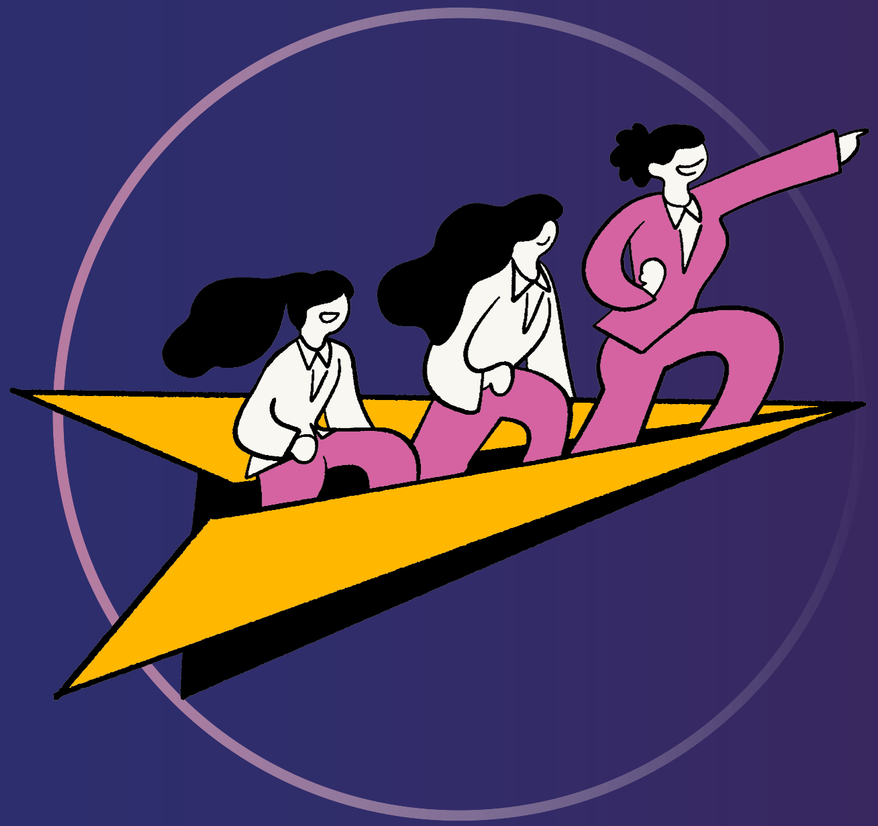
Proses mengolah data numerik

Menyajikan dalam bentuk statistik

INSTRUMEN PENGUMPULAN DATA

- Kuesioner
- Tes
- Observasi terstruktur





TAHAPAN
ANALISIS DATA KUANTITATIF

- EDITING
- CODING
- TABULASI
- PENGOLAHAN

TEKNIK ANALISIS DESKRIPTIF

- Menyajikan data dalam tabel dan grafik

- - MEAN
- - MEDIAN
- - MODUS
- - STANDAR DEVIASI

TEKNIK ANALISIS INFERENSIAL

- Menggeneralisasi hasil ke populasi

- UJI HIPOTESIS
- KORELASI
- REGRESI

CONTOH

UJI STATISTIK

- UJI T
- ANOVA

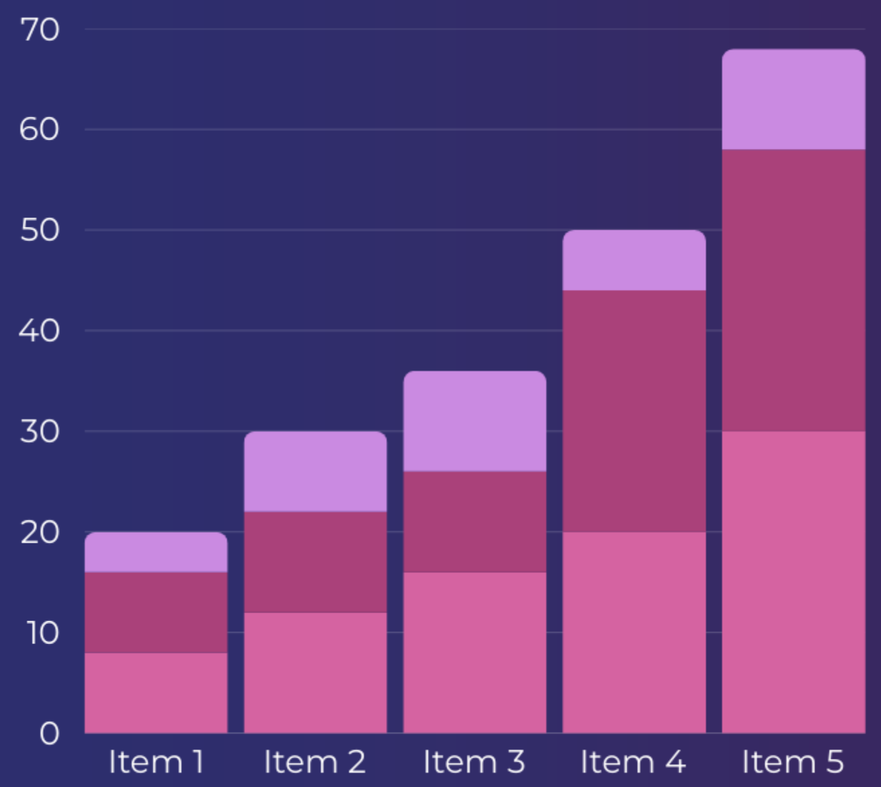
SOFTWARE

ANALISI DATA KUANTI

- SPSS
- AMOS
- SMARTPLS

APA ITU R&D DALAM PENELITIAN?

- Pengembangan produk baru
- Validasi melalui riset



TUJUAN
R&D

- Menghasilkan produk efektif
- Meningkatkan kualitas pembelajaran

KARAKTERISTIK PENELITIAN R&D

Terdapat proses dan pengujian

Siklus evaluasi dan revisi

Berorientasi pada produk

LANGKAH-LANGKAH
PENELITIAN R&D

Studi Pendahuluan

Desain Produk

Validasi Ahli

Revisi Produk

Uji Coba Terbatas

Uji Lapangan

MODEL R&D
BORG ANG GALL

- Studi penelitian dasar
- Pengembangan produk
- Evaluasi dan revisi

MODEL R&D
ADDIE

- Analysis
- Design
- Development
- Implementation
- Evaluation

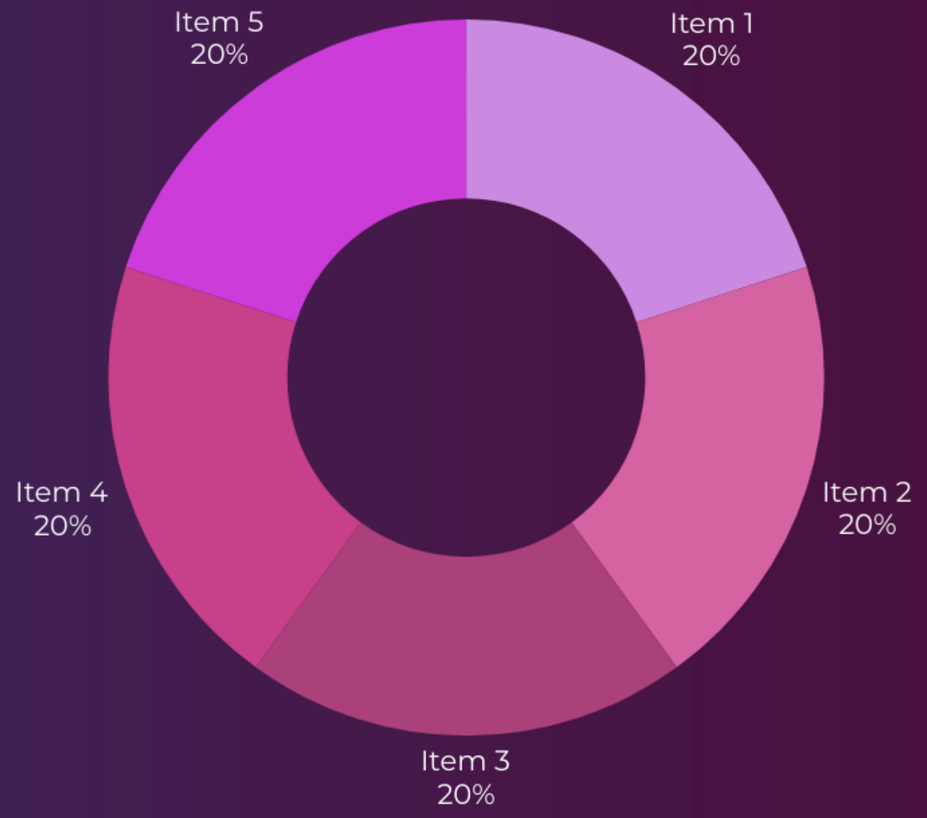
DATA
PENELITIAN R&D

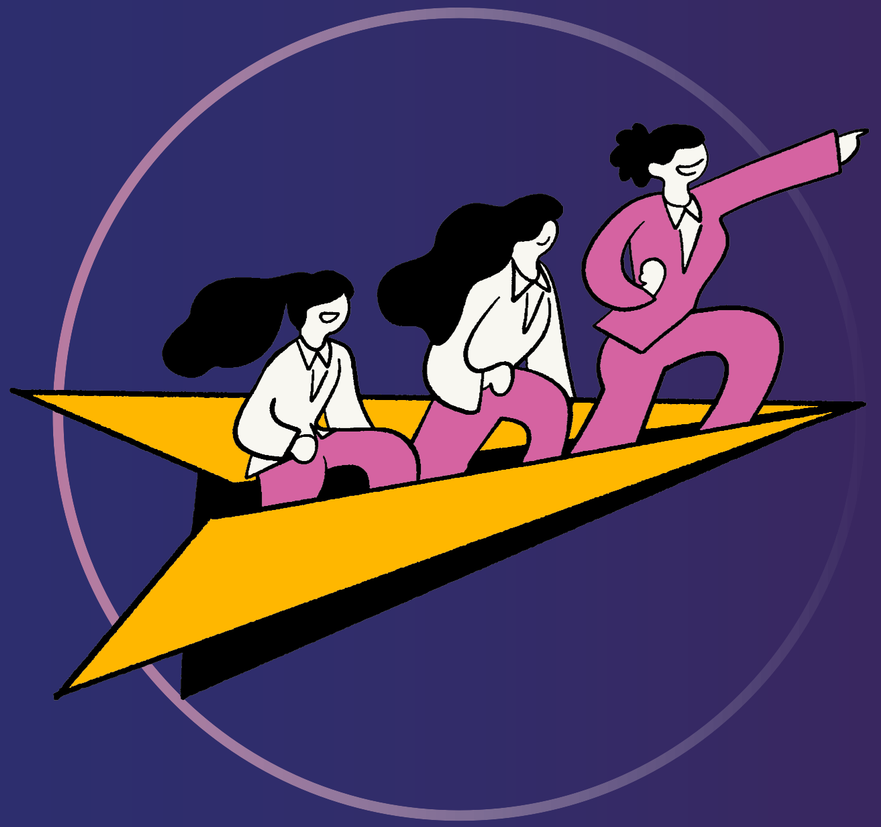
Kuantitatif

Kualitatif

JENIS
PENGUJIAN DALAM R&D

- Validitas
- Reliabilitas
- Efektivitas





ANALISI DATA KUALITATIF
DALAM R&D

- OBSERVASI
- WAWANCARA
- DOKUMENTASI

PENGUJIAN VALIDITAS PRODUK

- Ahli Media
- Ahli Materi

PENGUJIAN KEPRAKTISAN PRODUK

- User Experience
- Kepuasan Pengguna

PENGUJIAN EFEKTIVITAS PRODUK

- Pretest-posttest
- Gain Score Anaysis

TEKNIK UJI COBA PRODUK

- one group pretest-posttest
- Quasi Experiment

CONTOH ANALISIS DATA
UJI VALIDITAS

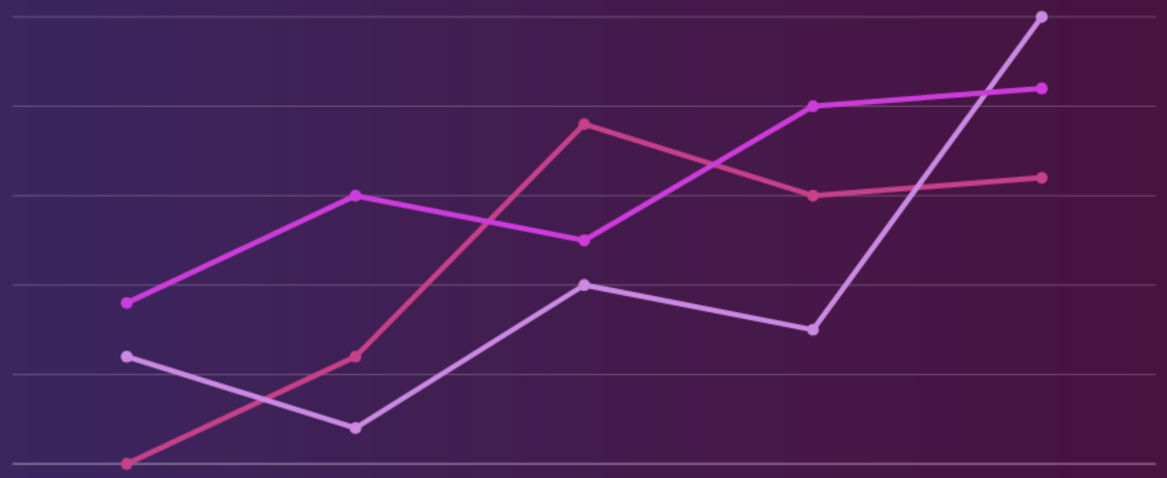
- Korelasi Pearson
- Aiken's V

CONTOH ANALISIS DATA
UJI EFEKTIVITAS

- Paires t-test
- Effect Size Calculation

BEST PRACTICES
DALAM ANALISIS DATA

- Gunakan software analisis
- Konsultasi ahli statistik



THANK YOU!

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