



APPLIED RESEARCH DESIGNS IN PSYCHOLOGY

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OVERVIEW OF APPLIED RESEARCH IN PSYCHOLOGY

Purpose of Applied Psychology

Applied psychology focuses on solving practical problems using psychological theories and methods in real-world settings.

Domains of Application

Applied research addresses issues in such as mental health, education, workplace productivity, and social behaviour.

Research Designs and Methods

Various research designs and mixed methods are used, each with strengths, limitations, and ethical considerations.

TYPES OF APPLIED RESEARCH DESIGNS

CORRELATIONAL, CASE STUDY, AND LONGITUDINAL DESIGNS

Correlational Design Overview

Correlational studies explore relationships between variables without intervention, ideal for natural setting associations but do not prove causality.

Case Study Method

Case studies offer in-depth qualitative analysis of individuals or small groups, revealing rare phenomena but limited generalisability.

Longitudinal Design Insights

Longitudinal studies track changes over time to observe developmental trends, valuable for understanding long-term psychological effects.

CROSS-SECTIONAL AND SURVEY RESEARCH DESIGNS



Cross-Sectional Design Overview

Collects data at one point in time, offering efficient and cost-effective research methods. Useful for identifying group differences and trends.



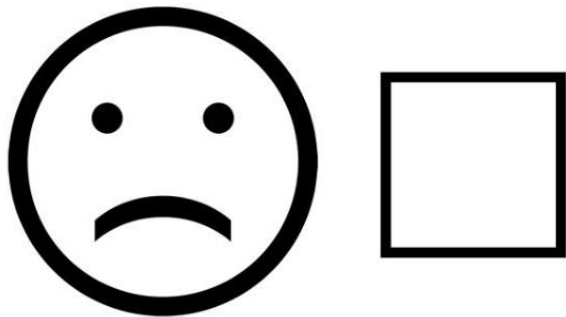
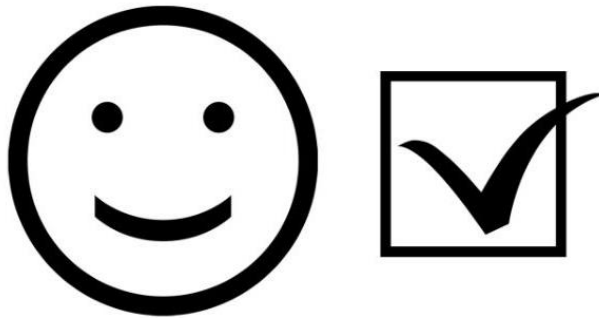
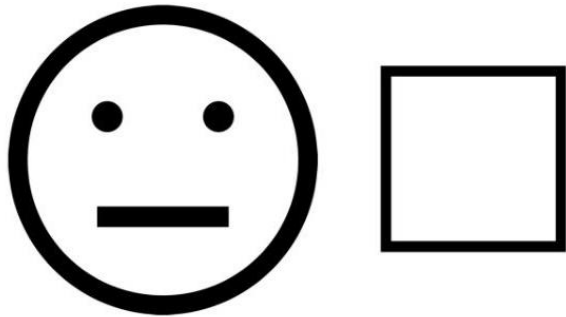
Survey Research Characteristics

Utilizes questionnaires and interviews to gather data from large populations. Scalable and easy to administer, widely used in psychology.



Limitations of Designs

Cross-sectional studies cannot show causality or changes over time; surveys may face response biases and lack detail.



OBSERVATIONAL DESIGNS

Observational Design Features

Observational designs record behaviour naturally without intervention, preserving ecological validity but risking observer bias and limited control.

Examples of Research Designs

Observational research studies prosocial behaviour in public, while surveys assess national mental health prevalence and service needs.



EXPERIMENTAL AND QUASI-EXPERIMENTAL DESIGNS

Experimental Design Features

Manipulates independent variables to observe effects on dependent variables with high internal validity.

Limitations of Experimental Designs

Ethical concerns and limited ecological validity restrict applicability in real-world settings.

Quasi-Experimental Designs

Lacks random assignment, suitable for real-world contexts where experimentation is impractical or unethical.

Challenges in Quasi-Experiments

Susceptible to confounding variables that may affect validity of findings in natural settings.

EXPERIMENTAL DESIGNS

Core Concept of Experimental Design

Experimental designs manipulate independent variables to study effects on dependent variables in controlled settings.

Strengths of Experimental Designs

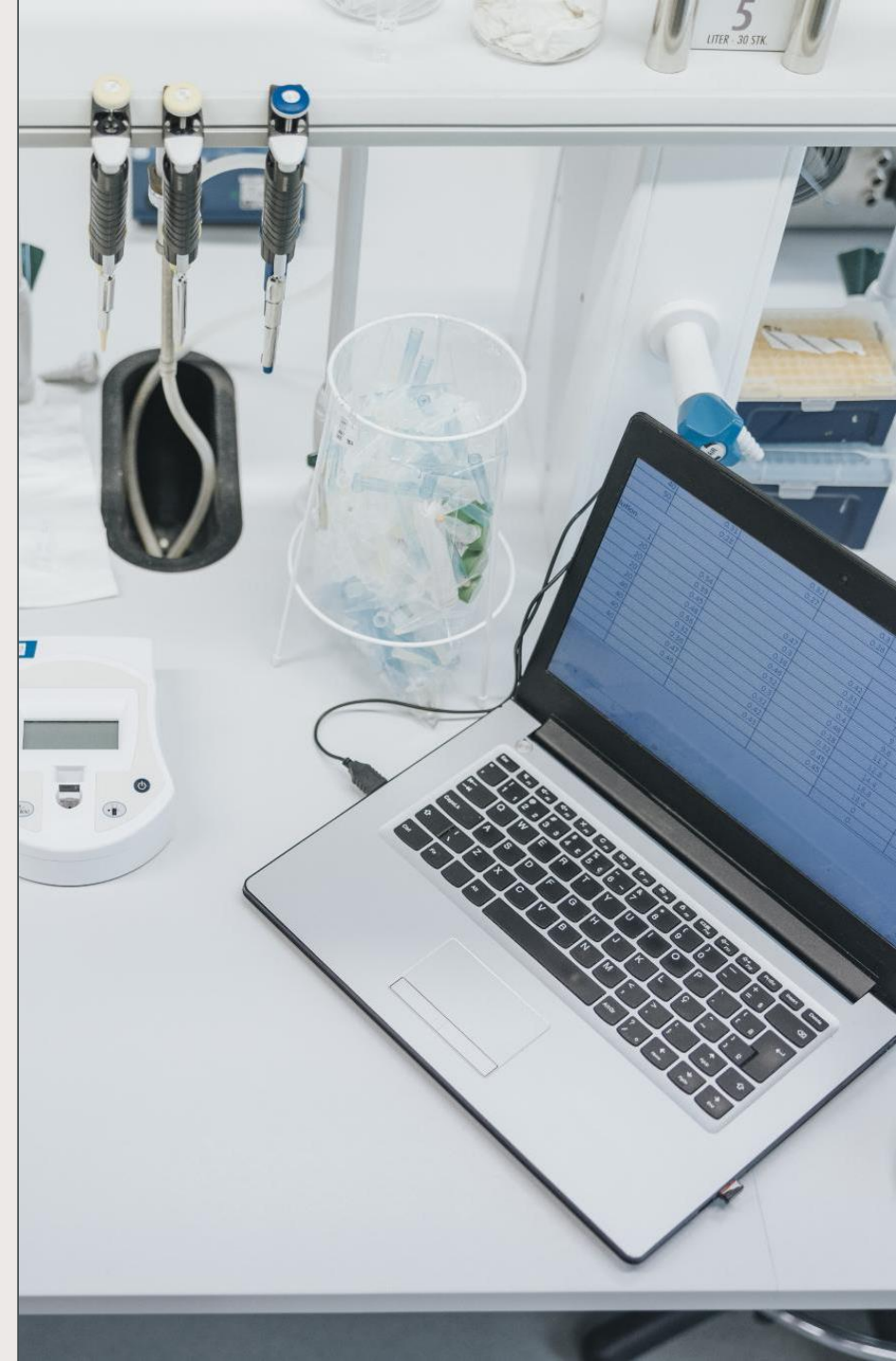
These designs establish causal relationships through control of extraneous variables and random assignment.

Limitations and Ethical Constraints

Artificial settings may lack real-world applicability and ethical issues constrain intervention types.

Randomised Controlled Trials

RCTs assess e.g. cognitive behavioural therapy efficacy but may overlook individual and environmental complexities.



QUASI-EXPERIMENTAL DESIGNS

Non-Random Assignment

Quasi-experimental designs do not use random assignment, making them practical for real-world applications like schools and communities.

Strengths and Relevance

These designs offer practical relevance and applicability in everyday contexts despite some limitations in control.

Limitations and Bias

Potential biases and reduced internal validity are challenges due to the lack of full experimental control.

Example: Mindfulness Program

Evaluating a school-based mindfulness program using existing class schedules illustrates quasi-experimental design in practice.



QUALITATIVE RESEARCH DESIGNS IN APPLIED PSYCHOLOGY



CORE CONCEPTS OF QUALITATIVE RESEARCH



DEFINITION AND COMMON METHODS

Qualitative Research Definition

Qualitative research seeks to understand human behavior through non-numerical data like words and images.

Interviews

Interviews explore individual experiences and perspectives deeply to gather rich psychological insights.

Focus Groups

Focus groups facilitate group discussions to explore collective views and social dynamics among participants.

Observational Studies

Observational studies involve watching and recording behavior in natural settings for context-rich data.

ADVANTAGES IN APPLIED PSYCHOLOGY



Rich and Detailed Data

Qualitative research captures the depth and complexity of psychological experiences in rich detail.



Flexibility in Research Design

Qualitative methods are adaptive, allowing changes based on emerging findings during research.



Exploration of Complex Issues

Qualitative research effectively explores complex psychological issues like emotions and identity formation.



LIMITATIONS AND CHALLENGES

Subjectivity and Bias

Qualitative research often involves subjectivity and researcher bias, impacting the validity and reliability of findings.

Limited Generalizability

Small, non-random samples limit the generalizability of qualitative research results to broader populations.

Time-Consuming Process

Extensive data collection and analysis make qualitative research a time-consuming process.

Lack of Standardization

The absence of standardized procedures hinders replicability and verification of qualitative research findings.

INTERVIEWS IN TRAUMA RESEARCH

In-depth Personal Narratives

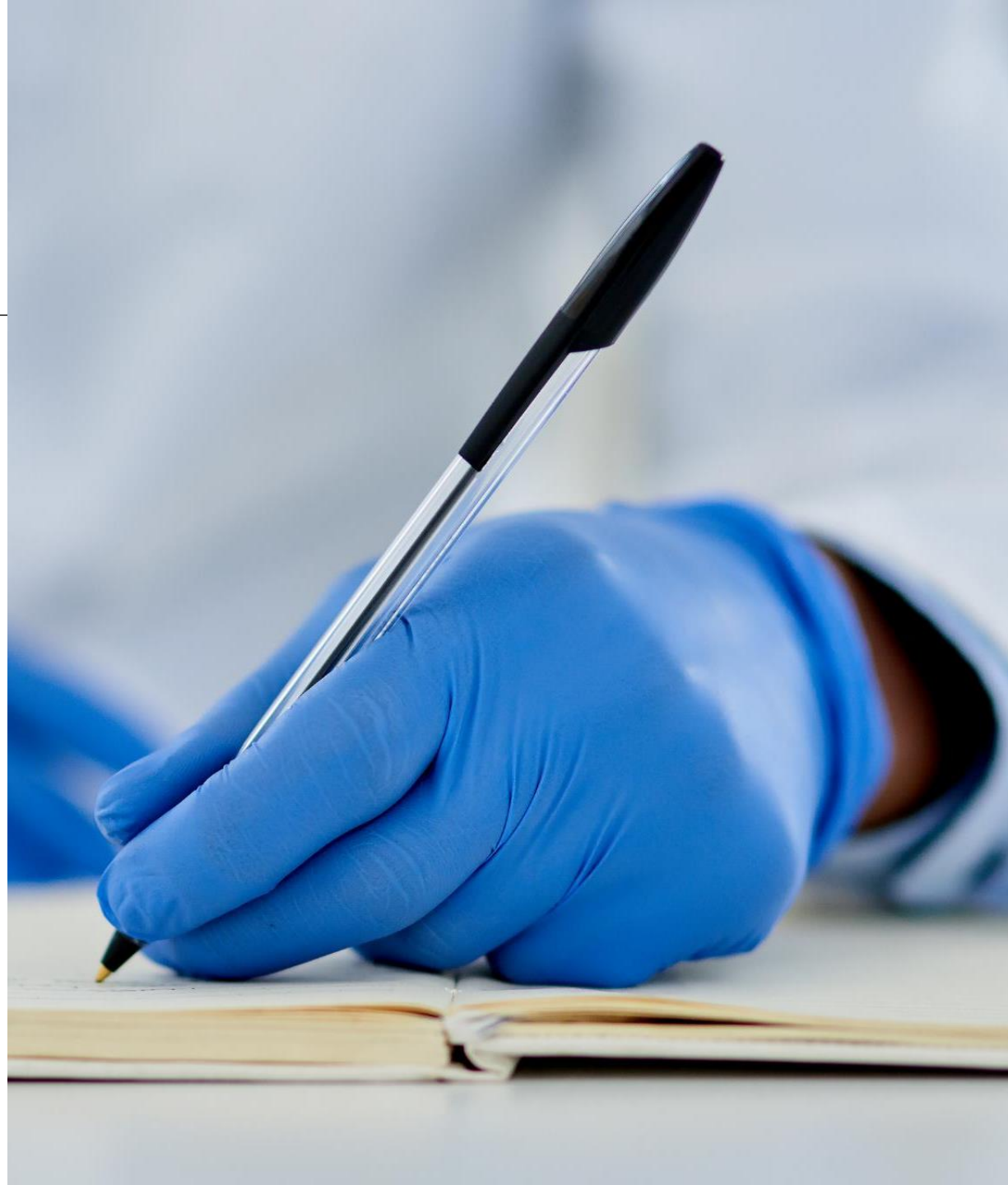
Interviews enable exploration of trauma survivors' personal stories and emotional responses in detail.

Strengths of Qualitative Interviews

This method provides comprehensive understanding to inform effective therapeutic interventions.

Limitations and Ethical Concerns

Small sample sizes and sensitive topics require ethical care and skilled interviewing techniques.





EXPLORING ATTITUDES AND INTERACTIONS

Purpose of Focus Groups

Focus groups help explore attitudes toward mental health interventions through group discussions and collective viewpoints.

Strengths of Focus Groups

They capture social influences and group dynamics, allowing participants to build on each other's responses for richer data.

Weaknesses of Focus Groups

Dominant voices may skew discussions, limiting diversity of perspectives and affecting data validity.

Managing Group Dynamics

Ensuring equitable participation is essential for valid and comprehensive insights in focus group research.



BALANCING STRENGTHS AND WEAKNESSES

Strengths of Qualitative Research

Qualitative research offers depth, context, and flexibility, enabling nuanced insights into complex psychological issues.

Weaknesses of Qualitative Research

Challenges include potential bias, limited generalizability, and time-intensive data collection processes.

Balanced Research Approach

Researchers must acknowledge limitations, employ ethical rigor, and carefully plan to enhance study quality.

MIXED METHODS DESIGNS



OVERVIEW AND TYPES OF MIXED METHODS DESIGNS

Mixed Methods Integration

Combining qualitative and quantitative approaches enhances understanding and validates findings through triangulation.

Convergent Parallel Design

Collect qualitative and quantitative data simultaneously then merge for comprehensive analysis.

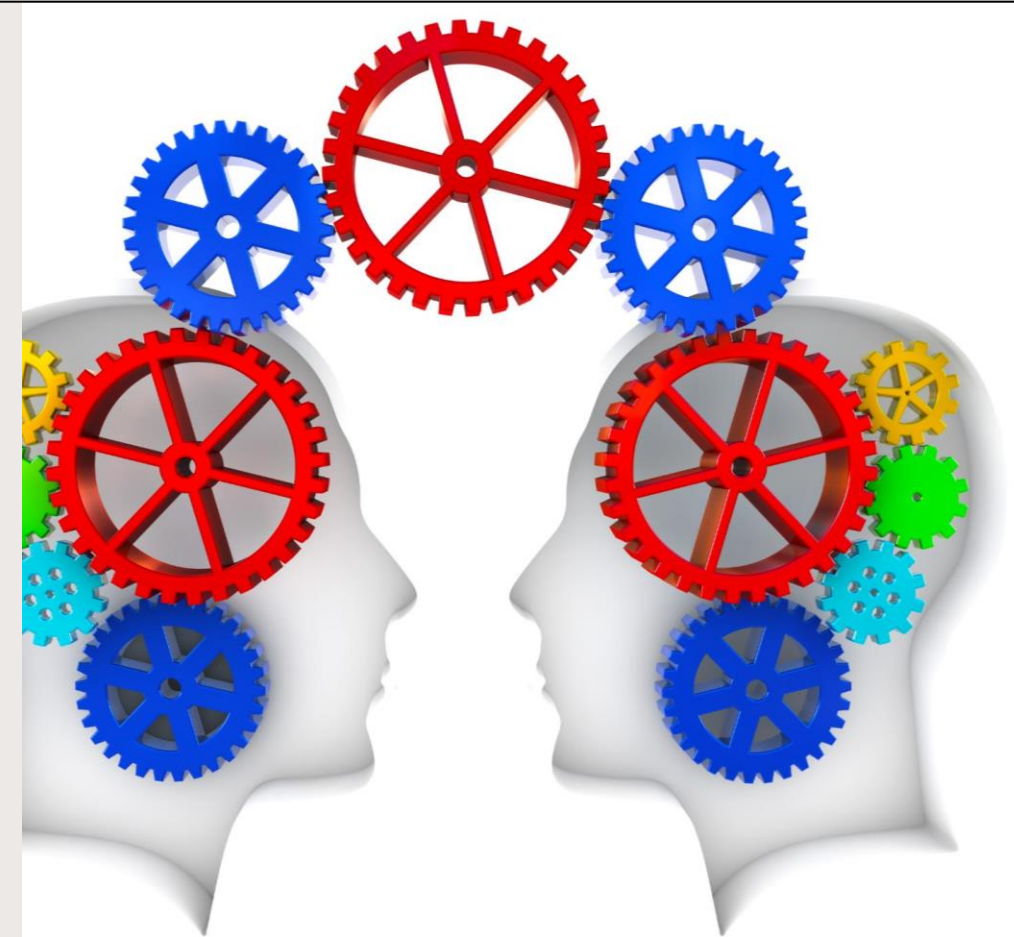
Sequential Designs

Includes explanatory sequential starting with quantitative followed by qualitative, and exploratory sequential starting with qualitative then quantitative data collection.

Embedded Design

Incorporates one method within another, like qualitative interviews inside a quantitative survey for richer insights.

OVERVIEW AND BENEFITS OF MIXED METHODS



Integration of Research Methods

Mixed methods combine qualitative and quantitative research for a fuller understanding of psychological issues.

Applied Research Utility

Useful in applied settings by capturing numerical data and personal experiences together.

Enhanced Validity and Triangulation

Combining methods improves validity, supports triangulation, and enriches research insights.

Stakeholder Engagement

Mixed methods facilitate engagement by addressing both statistical results and participant perspectives.



REAL-LIFE EXAMPLE OF MIXED METHODS IN MENTAL HEALTH

Quantitative Data Collection

Measured anxiety levels before and after intervention using structured surveys for statistical evaluation.

Qualitative Data Collection

Conducted interviews to gather participant experiences and personal insights about the mental health intervention.

Mixed Methods Benefits

Combining statistical data and personal experiences enables a richer understanding of therapy effectiveness.

ETHICAL AND PRACTICAL CONSIDERATIONS



ETHICAL PRINCIPLES IN APPLIED RESEARCH

Informed Consent

Participants must be fully informed about research aims, procedures, and their rights before participation.

Confidentiality and Anonymity

Researchers protect personal data and keep participant identities anonymous whenever possible.

Ethical Approval and Oversight

Research must be approved by ethical boards to ensure compliance with standards and participant safety.

Safeguards for Vulnerable Groups

Extra protections like parental consent and simplified information are necessary for vulnerable populations.



PRACTICAL CHALLENGES

Participant Access Challenges

Accessing participants in institutions like schools and hospitals often poses significant challenges for researchers.

Time and Resource Constraints

Limited time and resources can restrict the scope and depth of applied research studies.

Data Management and Compliance

Secure data storage and GDPR compliance are essential components of ethical research data management.

Best Practices for Research

Collaboration, pilot testing, transparent reporting, and ethical reflection ensure impactful applied research.

PRACTICAL CHALLENGES

Managing Time and Resources

Balancing limited time and resources requires careful planning and adaptation of research protocols to fit real-world constraints.

Balancing Rigour and Feasibility

Research designs must be flexible to maintain scientific rigour while ensuring feasibility in diverse and dynamic environments.

Enhancing Ecological Validity

Real-world research improves ecological validity by producing findings applicable to everyday contexts and stakeholders.





DATA MANAGEMENT AND STAKEHOLDER ENGAGEMENT

Secure Data Management

Researchers must ensure secure data storage and anonymisation while complying with regulations like GDPR for ethical research.

Stakeholder Engagement

Engaging stakeholders such as practitioners and policymakers improves research relevance and impact through collaboration.

Co-production Approaches

Involving stakeholders in research design and dissemination fosters trust and mutual benefits in co-production approaches.

Accessible Dissemination

Sharing research findings in accessible formats like policy briefs and presentations ensures practical and policy impact.

IN CLASS EXERCISE ...

EXAMPLE.. SCHOOL-BASED INTERVENTION

Intervention Design

Mindfulness sessions were implemented using a quasi-experimental design involving intervention and control groups.

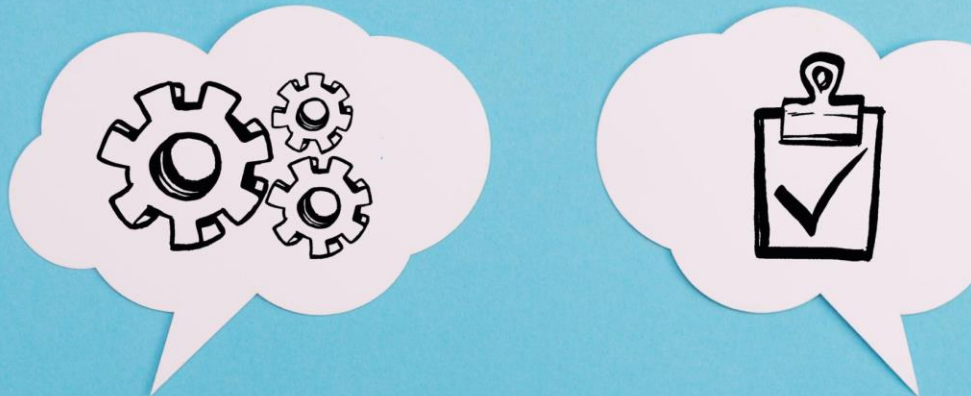
Data Collection Methods

Ethical Considerations

Practical Challenges and Outcomes



EXAMPLE: MENTAL HEALTH SERVICE EVALUATION



Mixed Methods Evaluation

The study combines quantitative scales and qualitative interviews to comprehensively evaluate mental health service outcomes.

Stakeholder Engagement

Ethical and Practical Considerations

Research Impact and Dissemination

SHORT BREAK

SUMMARY AND Q&A

Applied Research Designs Overview

Covered strengths and weaknesses of applied research designs in psychology with real-life educational and clinical examples.

Ethical and Practical Considerations

Emphasized balancing methodological rigour with ethical responsibility and practical feasibility in real-world research settings.

Stakeholder Engagement and Dissemination

Highlighted the importance of engaging stakeholders and effectively disseminating findings to translate research into practice.

