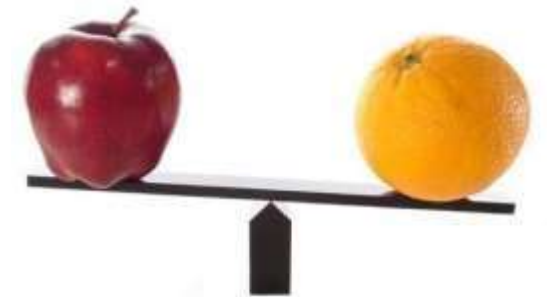


MIXING METHODOLOGIES: CONDUCTING MIXED METHODS RESEARCH

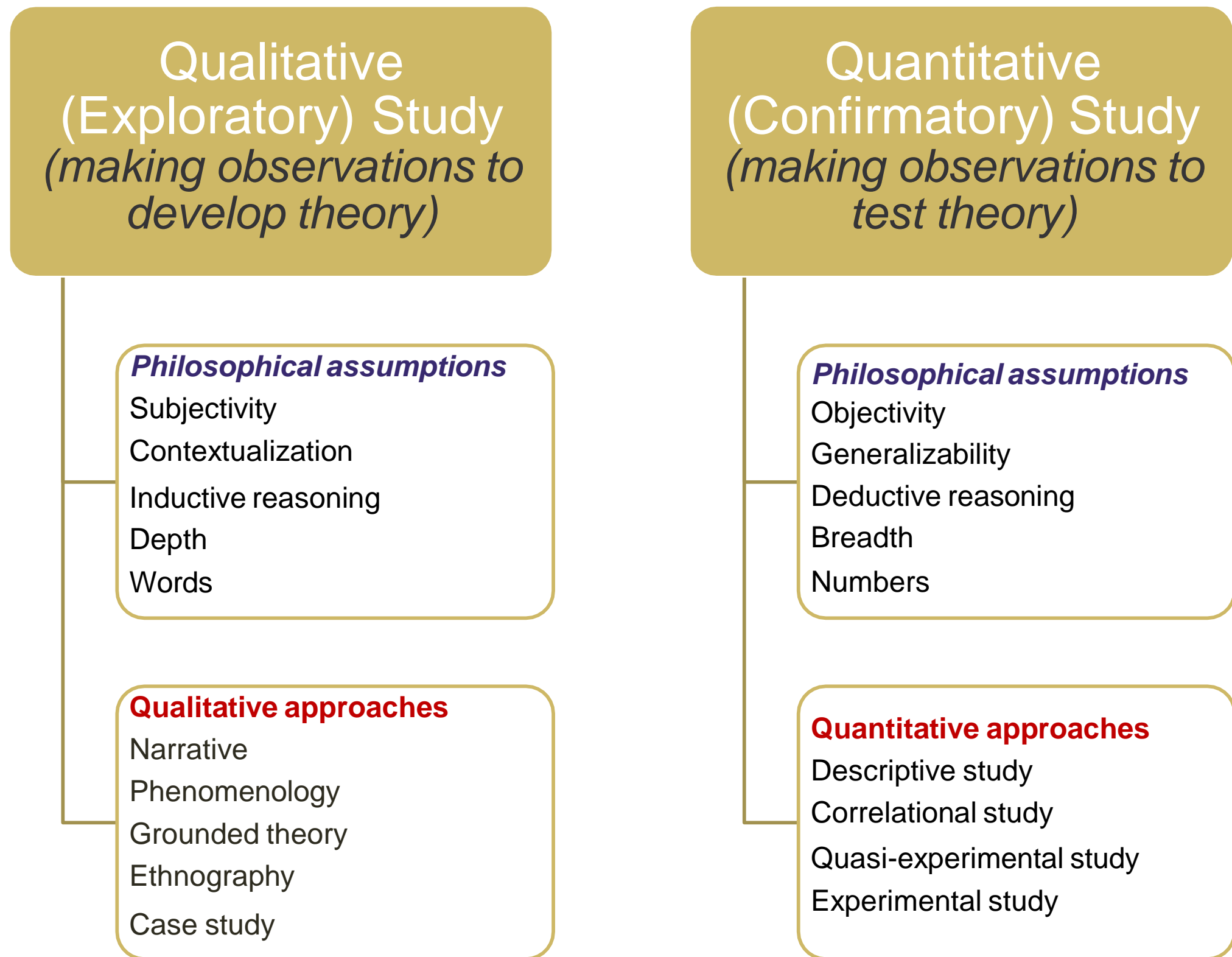
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Three Main Facts about Qualitative and Quantitative Methods

1. There are ***fundamental differences*** between qualitative and quantitative methods
2. Each of them has ***strengths and weaknesses***
3. Both can be used in a single study to ***adequately address a research problem***



Basic Differences Between Quantitative and Qualitative Research



(Creswell, 2007; Keele, 2011; Plano Clark & Creswell, 2008)

Definition of Mixed Methods Research

- *Collecting, analyzing, and interpreting* qualitative and quantitative data in a single study
- *Integrating/mixing* quantitative and qualitative data, findings, and/or interpretations



Essence of Mixed Methods Research

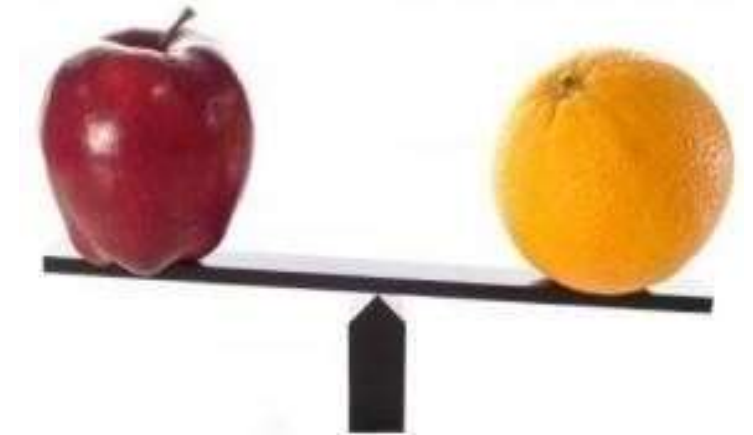


1. Enriching the findings
2. Increasing the depth and breadth
3. Testing a theory or model
4. Seeking for participants' inputs
5. Improving the trustworthiness

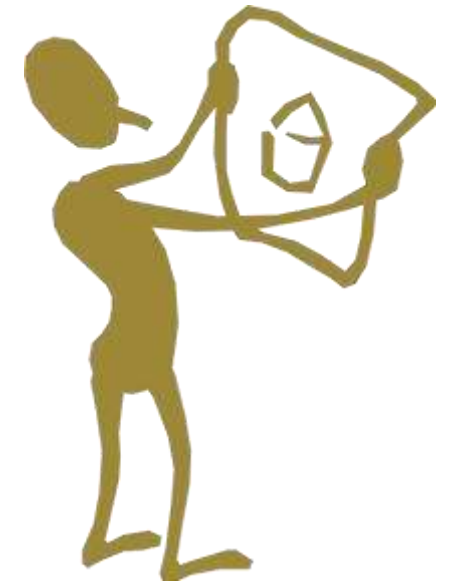
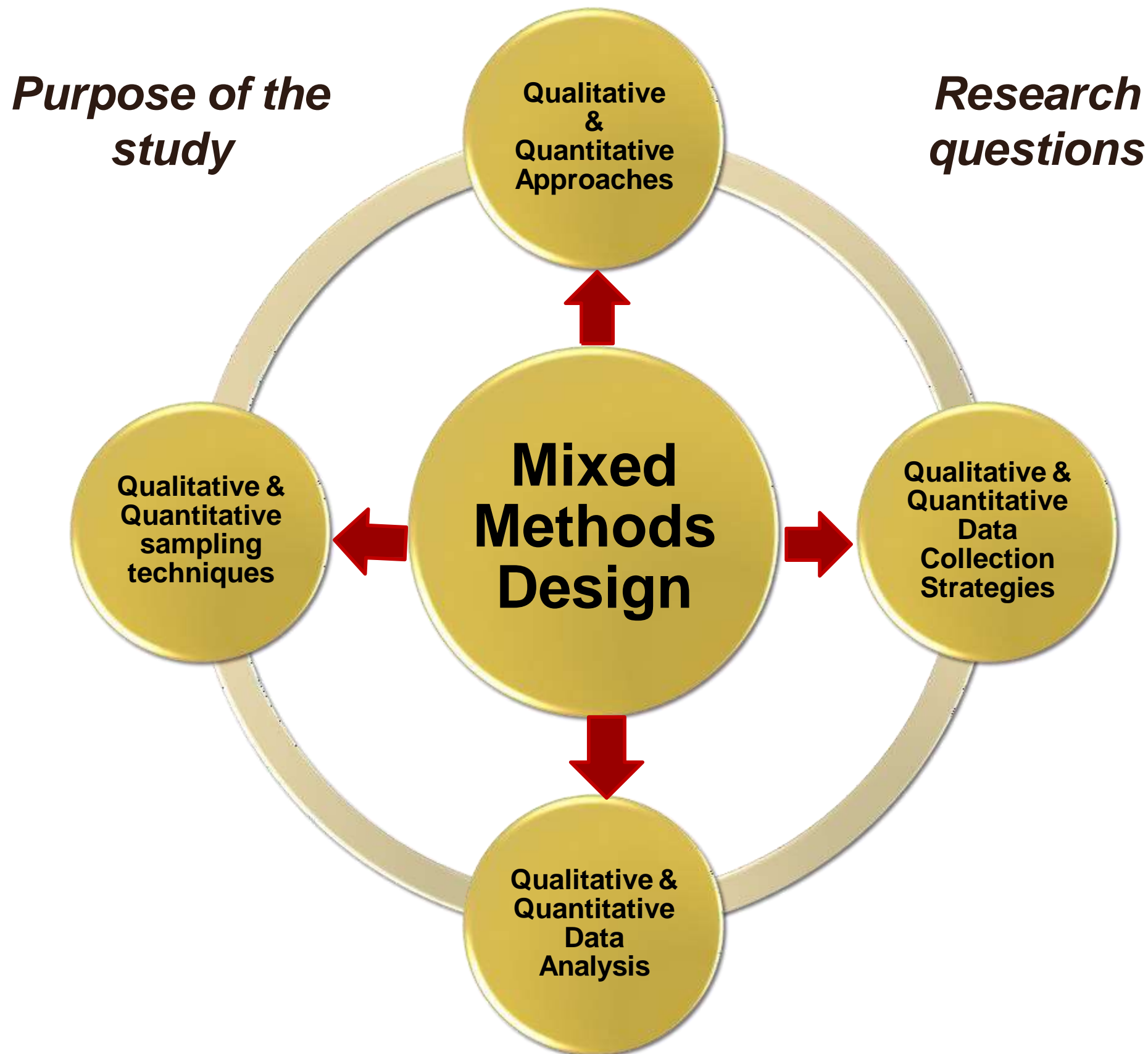
Considering Using a MixedMethods Approach

Things to ThinkAbout

- **Importance of using mixed methods approach**
 - ***Topic*** (nature of the research problem)
 - ***Contribution of your study***
 - ***Audience*** (research community and/or practitioners)
- ***Feasibility of the implementation***
(ability to conduct the study considering the time and resources available)
 - ***Research duration***
 - ***Research resources***
 - ***Availability/accessibility of participants***



Mixed Methods Research Design



***Research Plan -**
logical
description of
how data would
be collected,
and analyzed to
address the
research
question(s)*

(Yilmaz, 2013)

Types of Mixed Methods Design

Sequential Designs

- (a) Sequential *Explanatory* Design
- (b) Sequential *Exploratory* Design
- (c) Sequential *Transformative* Design



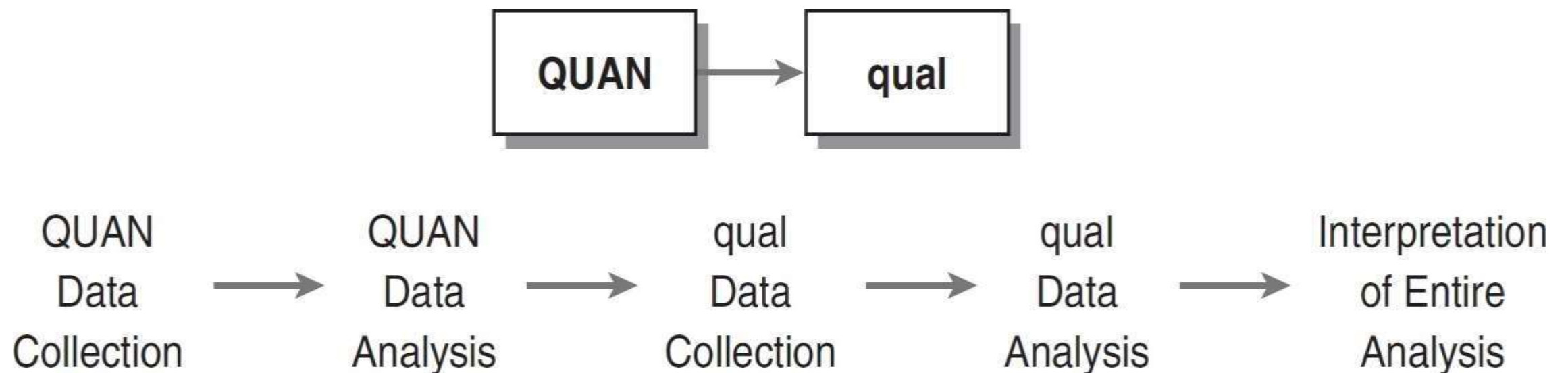
Concurrent Designs

- (a) Concurrent *Triangulation* Design
- (b) Concurrent *Nested* Design
- (c) Concurrent *Transformative* Design

Types of Mixed Methods Design (Cont.)

Sequential Designs

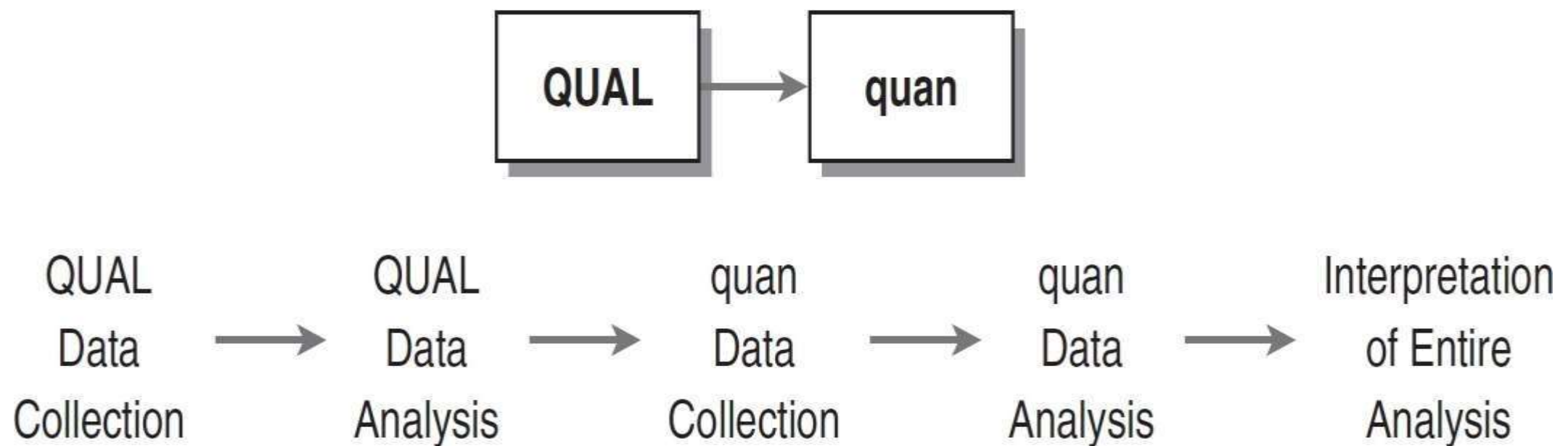
Sequential Explanatory Design (7.4a)



Types of Mixed Methods Design (Cont.)

Sequential Designs

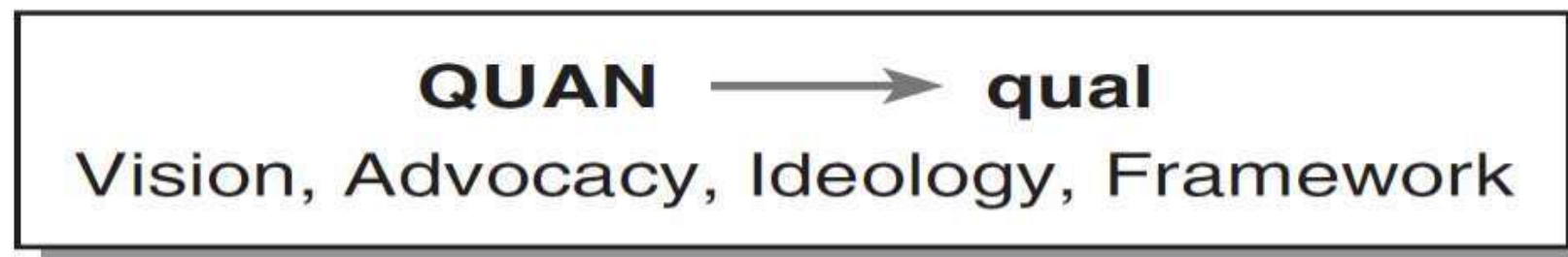
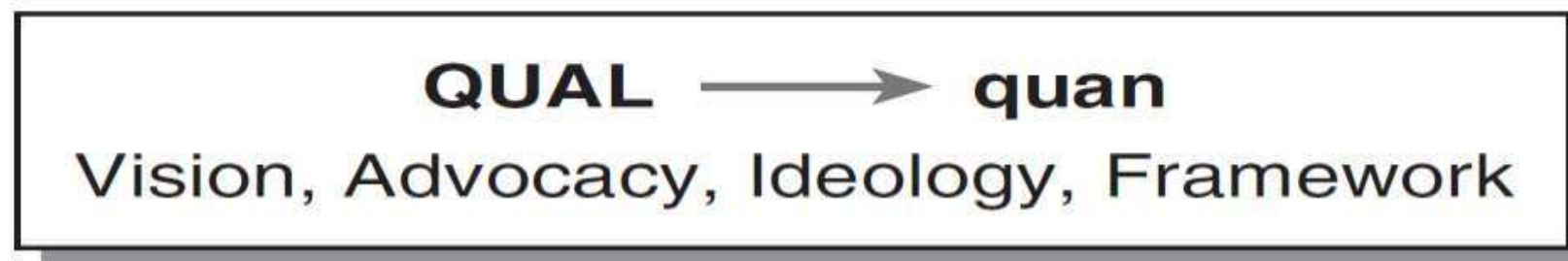
Sequential Exploratory Design (7.4b)



Types of Mixed Methods Design (Cont.)

Sequential Designs

Sequential Transformative Design (7.4c)



Types of Mixed Methods Design (Cont.)

Concurrent Designs

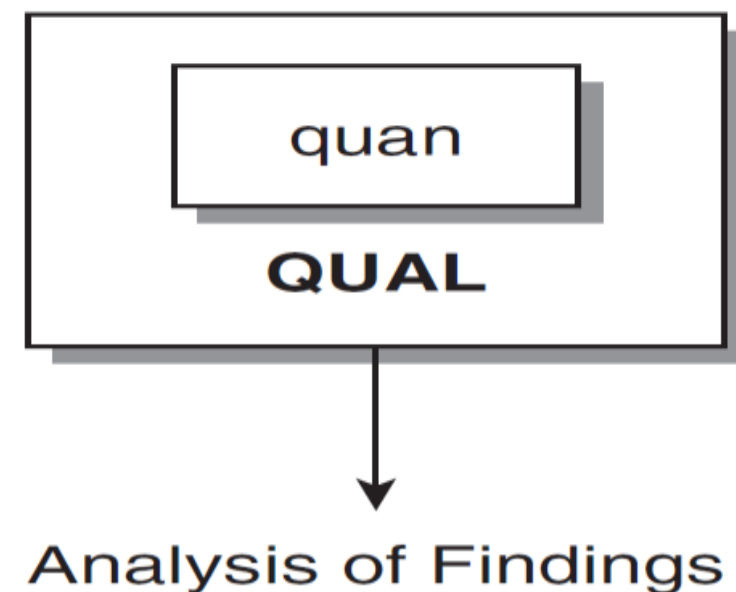
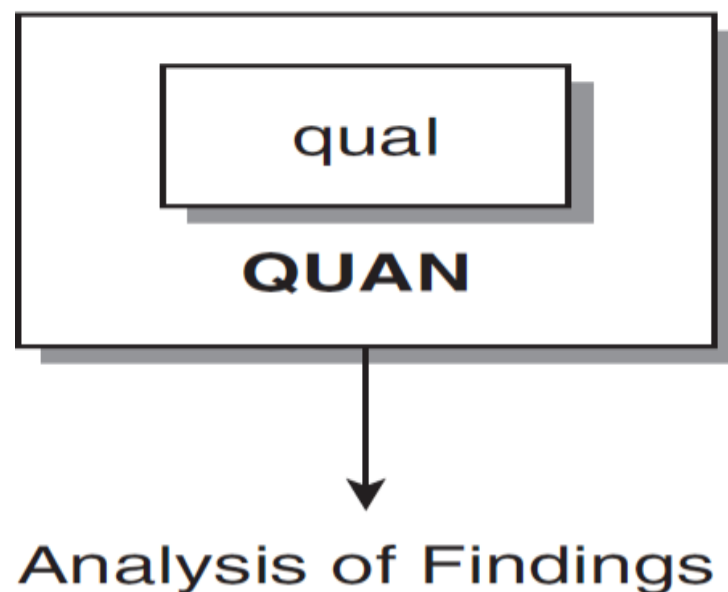
Concurrent Triangulation Design (7.5a)



Types of Mixed Methods Design (Cont.)

Concurrent Designs

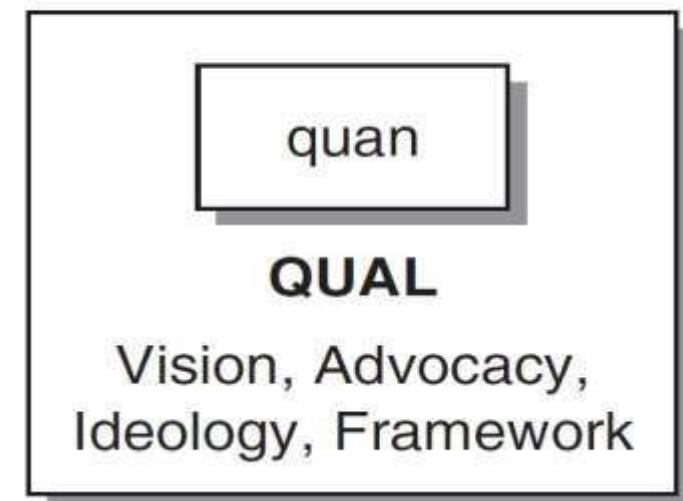
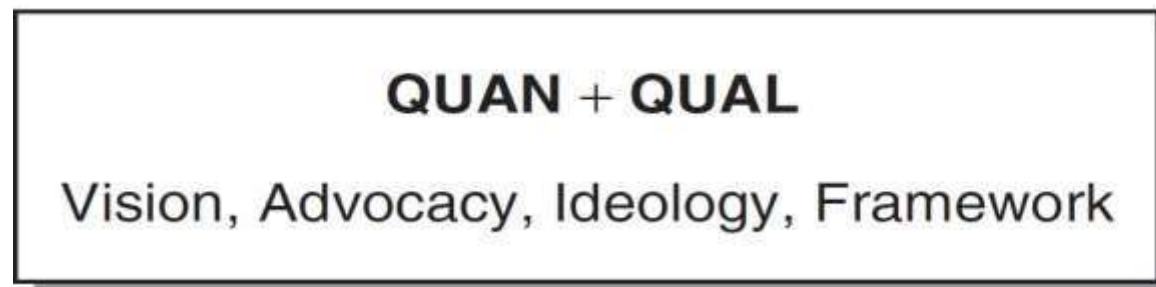
Concurrent Nested Design (7.5b)



Types of Mixed Methods Design (Cont.)

Concurrent Designs

Concurrent Transformative Design (7.5c)



Methodological Rationale of Mixed Methods Design

Questions to reflect on

1. **Triangulation**
2. **Complementarity**
3. **Development**
4. **Expansion**
5. **Initiation**

- *Why do you plan to use both qualitative and quantitative methods in your study?*
- *Why do you plan to use more than one data collection strategy?*
- *Why do you plan to collect both qualitative and quantitative data?*
- *What are the use of the qualitative and quantitative data or findings in your study?*

(Plano Clark, & Creswell, 2008)

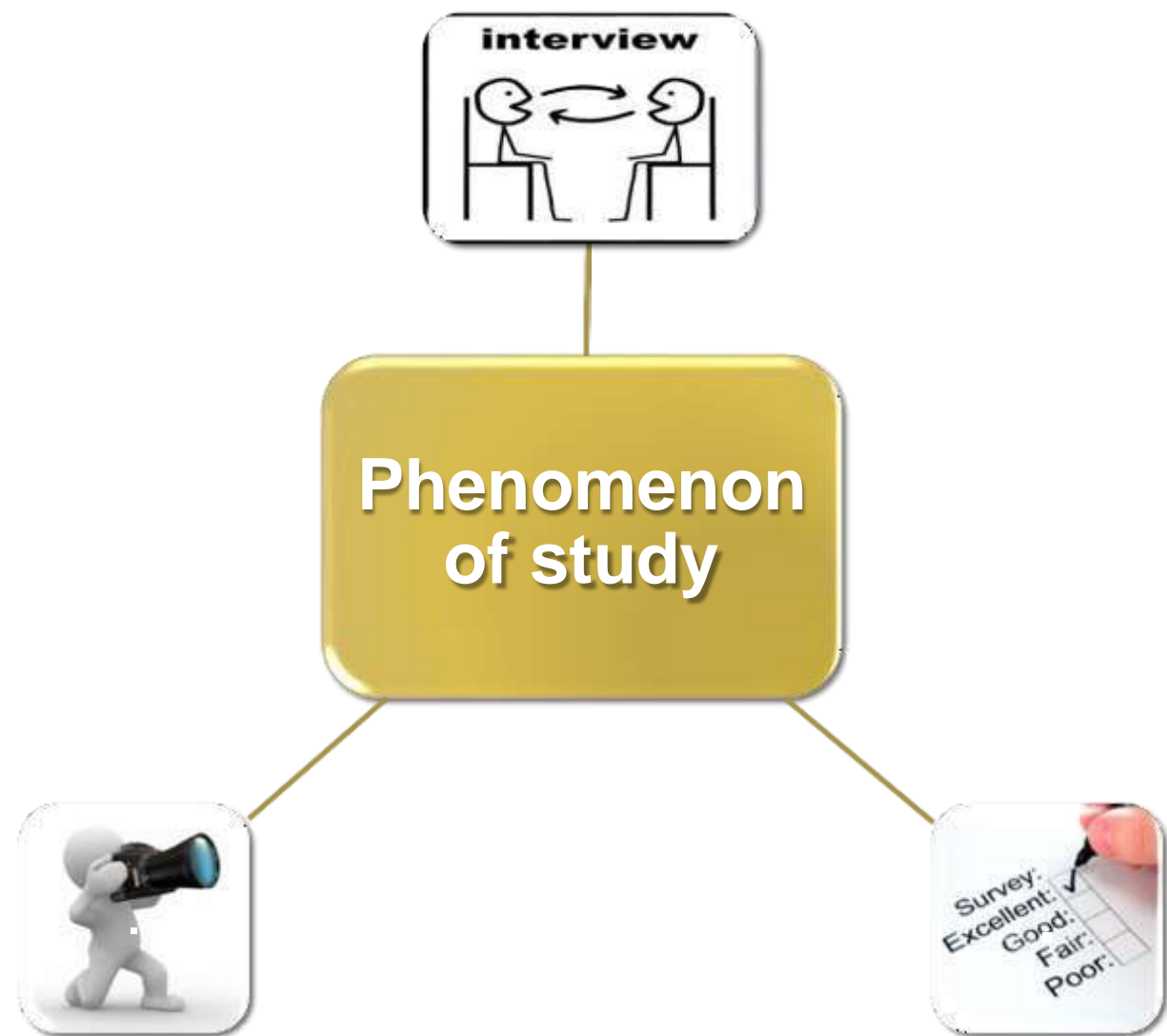
Methodological Rationale of Mixed Methods Design

Triangulation

- Using different methods to address the same phenomenon
 - “Seeks convergence, corroboration, correspondence of results from the different methods”

This rationale is associated with:

Concurrent *Triangulation*
Design



(Plano Clark, & Creswell, 2008, p. 127)

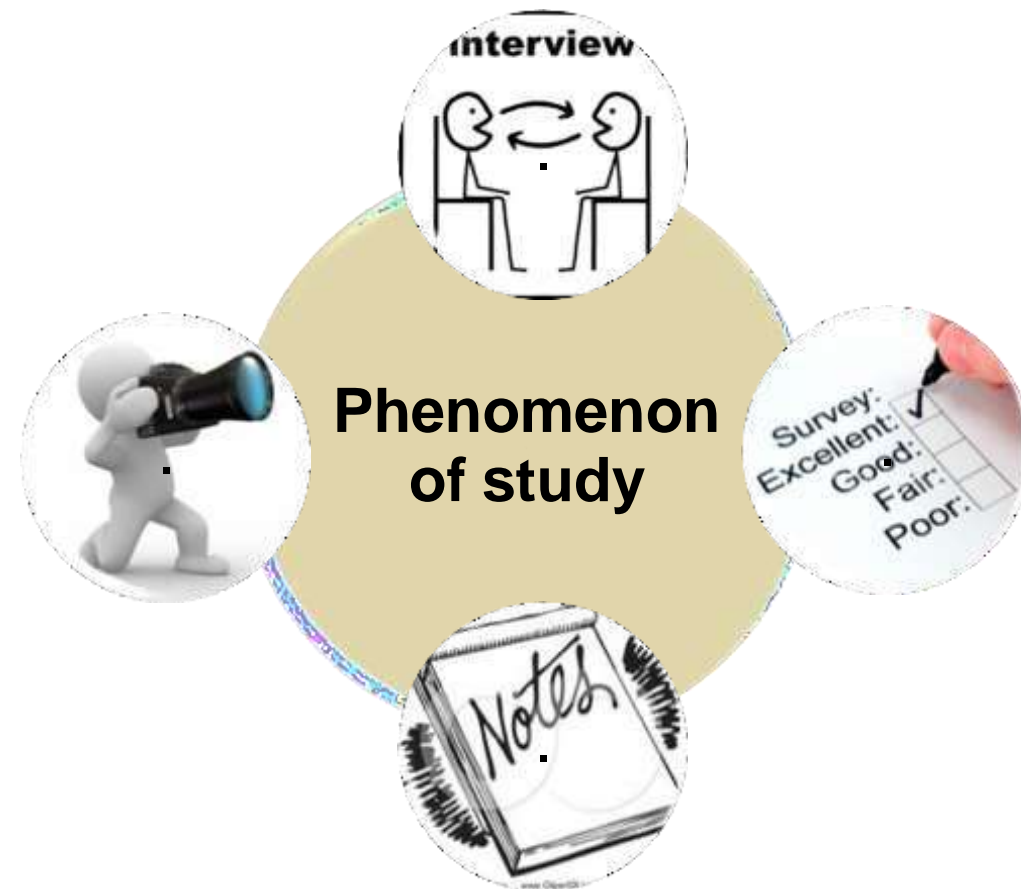
Methodological Rationale of Mixed Methods Design

Complementarity

- Using different methods to address the different parts of a phenomenon
 - “Seeks elaboration, enhancement, illustration, [and] clarification of results...”

This rationale is associated with:

1. Sequential *Explanatory* Design
2. Sequential *Exploratory* Design
3. Sequential *Transformative* Design
4. Concurrent *Nested* Design
5. Concurrent *Transformative* Design



(Plano Clark, & Creswell, 2008, p. 127)

Methodological Rationale of Mixed Methods Design

Development

- Using the results of one method to inform the other method
 - “Seeks to use the results from one method to help develop or inform the other method...”

This rationale is associated with:

1. Sequential *Exploratory* Design
2. Sequential *Transformative* Design



(Plano Clark, & Creswell, 2008, p. 127)

Methodological Rationale of Mixed Methods Design

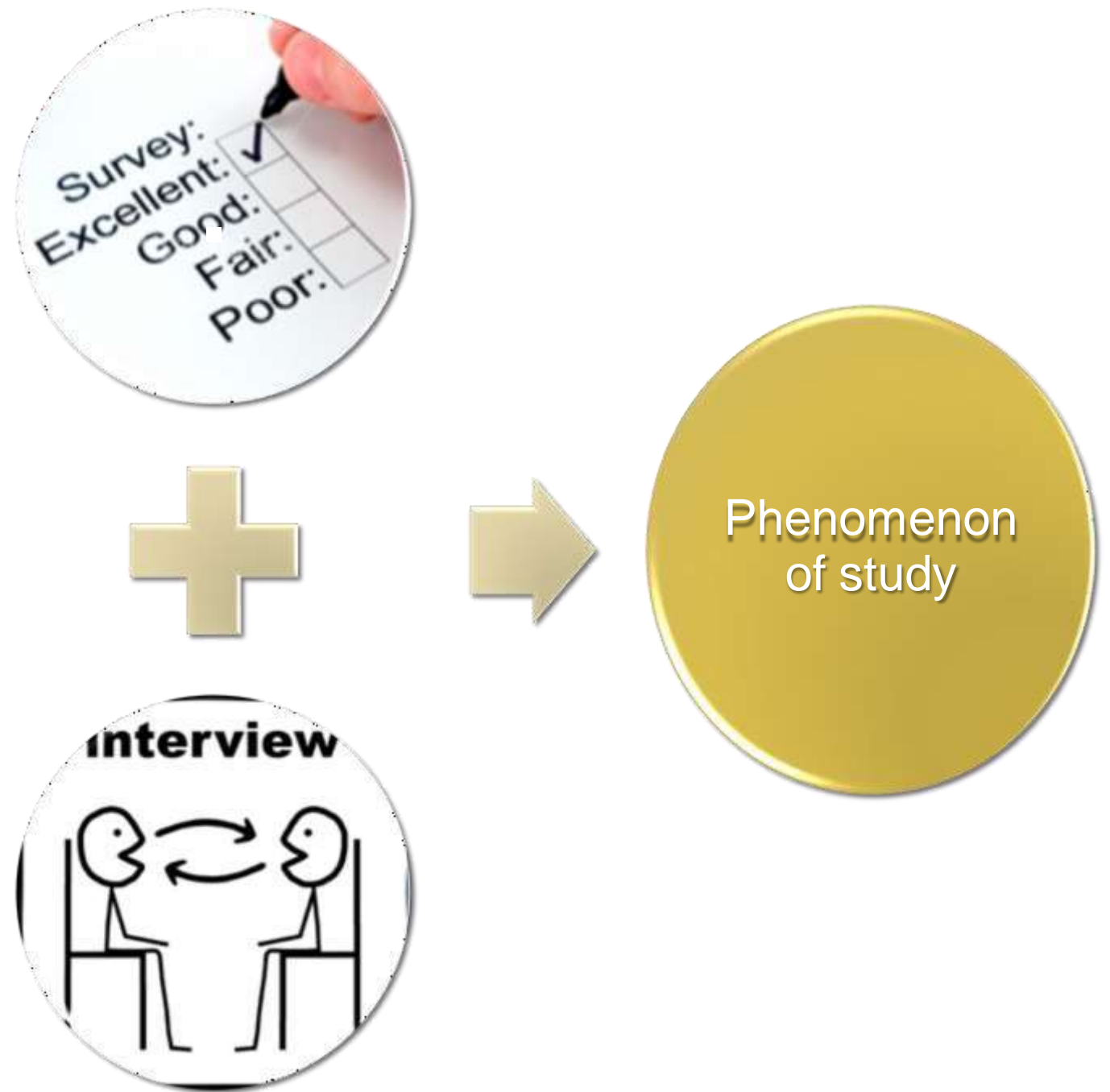
Expansion

- Using different methods to address the different parts of a phenomenon

“Seeks to extend the breadth and range of inquiry...”

This rationale is associated with:

1. Sequential *Exploratory* Design
2. Sequential *Transformative* Design
3. Concurrent *Nested* Design
4. Concurrent *Transformative* Design



(Plano Clark, & Creswell, 2008, p. 127)

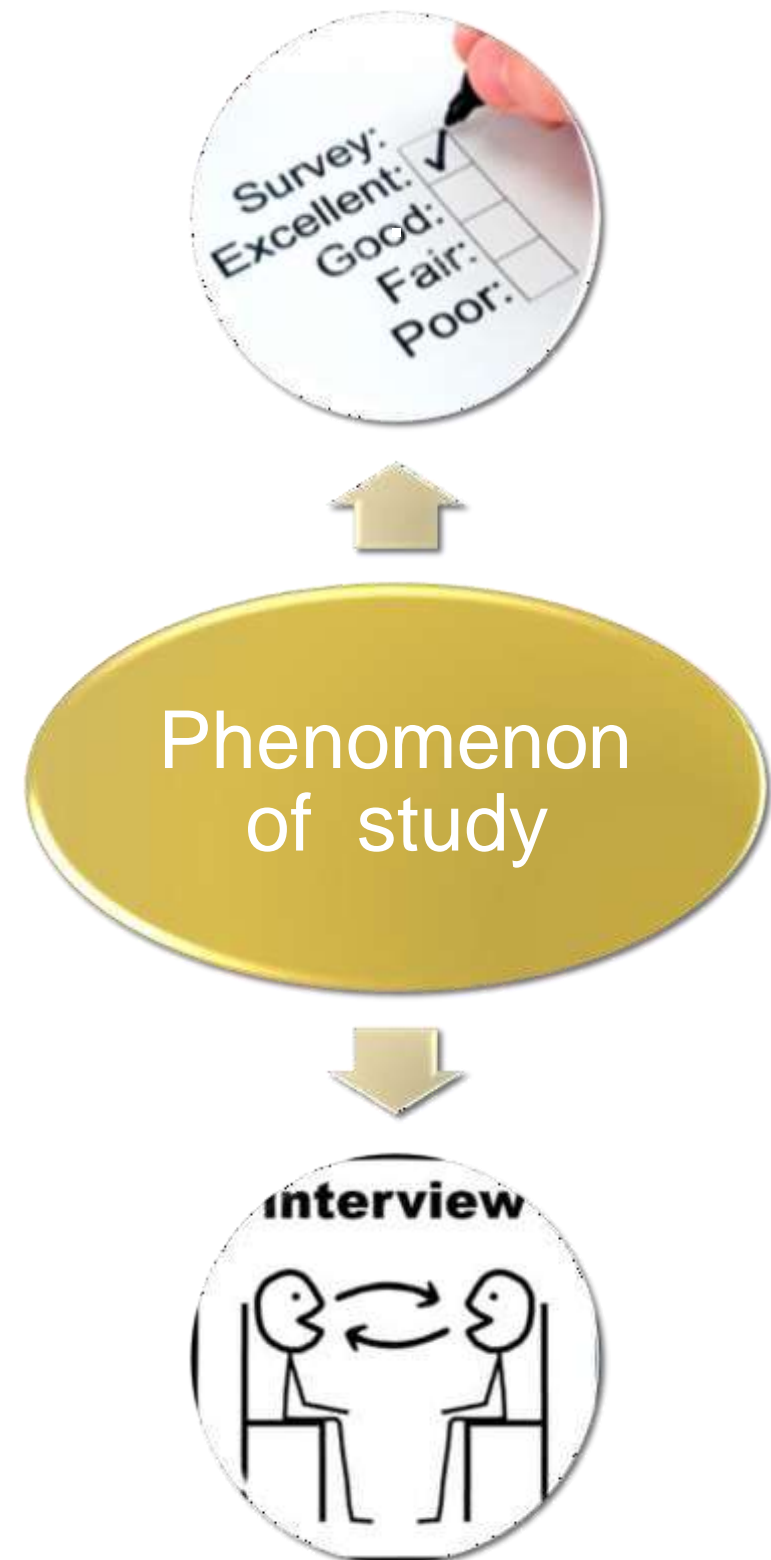
Methodological Rationale of Mixed Methods Design

Initiation

- Looking for contradictory results and using different methods to collect data to explain the discrepancy
 - “Seeks for discovery of paradox and contradiction, new perspectives of frameworks...”

This rationale is associated with:

1. Concurrent *Nested* Design
2. Concurrent *Transformative* Design



(Plano Clark, & Creswell, 2008, p. 127)

Determining an Appropriate Mixed Methods Design

Four main steps

1. **Think** about:
 - a. Sequence of the data collection
 - b. Kinds of data you plan to collect
 - c. Source of the data
2. **Develop** research questions
3. **Determine** the roles of qualitative and quantitative components of the study
4. **Decide** which mixed methods designs with their rationales best fit the roles of a qualitative and quantitative component (*i.e. determining consistency*)



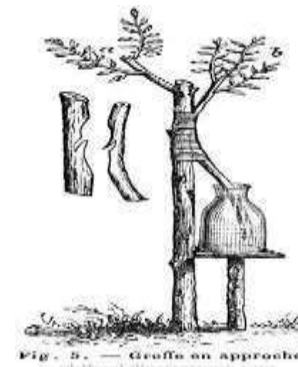
Purpose of the study



Determining an Appropriate Mixed Methods Design

1. *Think about:*

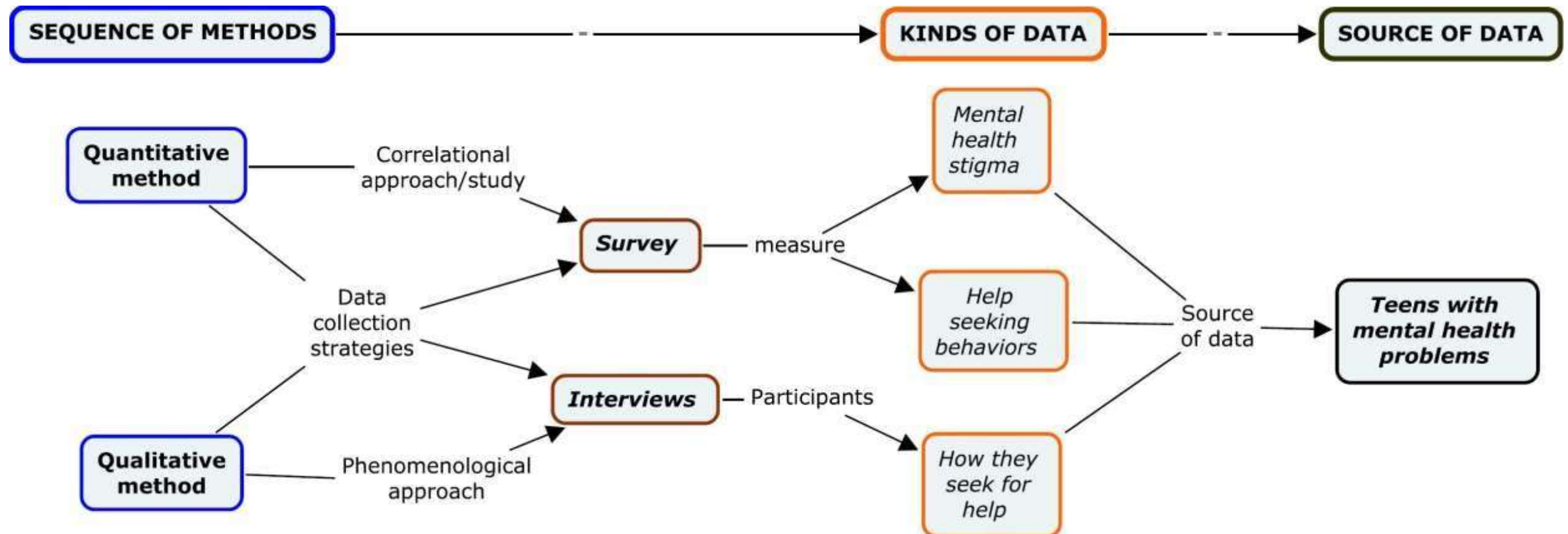
- Sequence of the data collection (*concurrent or sequential*)
- Kinds of data you plan to collect
- Source(s) of the data



Example

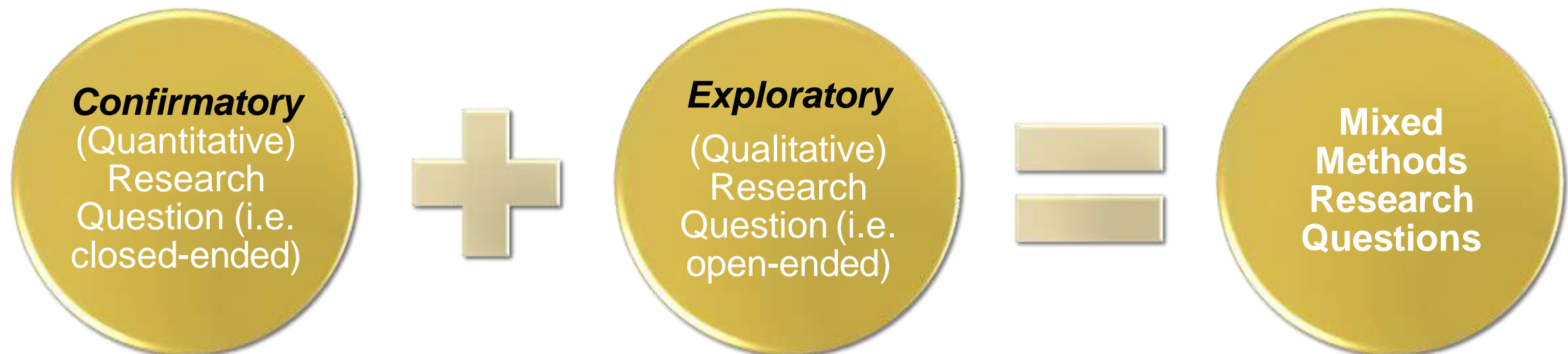
Purpose statement

The purpose of the study is to **determine the relationship between mental health stigma and help seeking behaviors** among teens with mental health problems in a low income neighborhood in Accra, Ghana. In addition, the study will focus on **examining how they seek for help** to address their mental health problems.



Determining an Appropriate Mixed Methods Design

2. *Develop* research questions



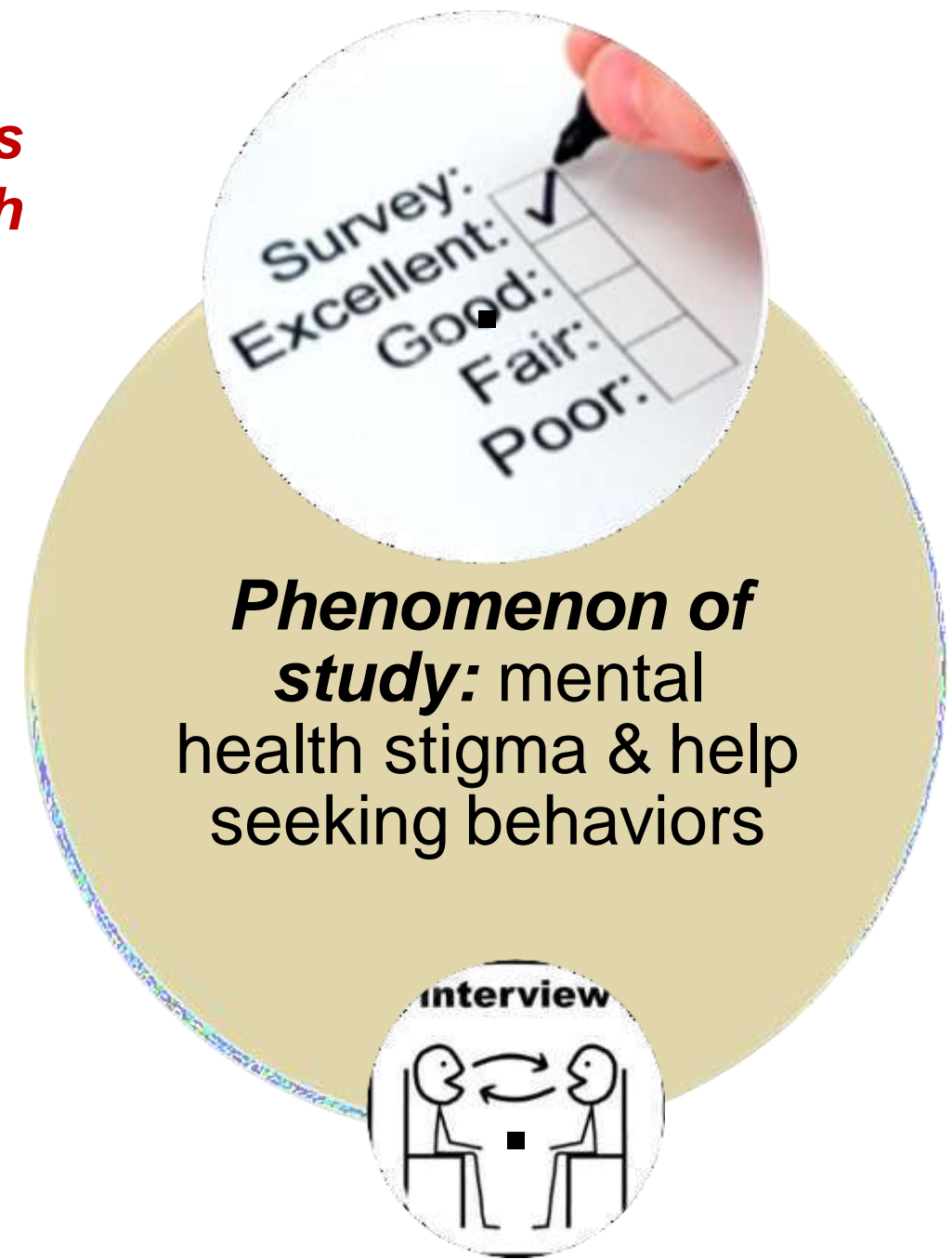
Research Questions

1. Is there a correlation between mental health stigma and help seeking behaviors among teens with mental health problems in a low income neighborhood in Accra, Ghana?
2. How do teens with mental health problems seek for help or mental health services?

Determining an Appropriate Mixed Methods Design

3. **Determine** the roles of qualitative and quantitative components of the study

- **In terms of how much each approach is contributing in addressing the research phenomenon**



Research Questions

1. Is there a correlation between mental health stigma and help seeking behaviors among teens with mental health problems in a low income neighborhood in Accra, Ghana?
2. How do teens with mental health problem seek for help or mental health services?

Determining an Appropriate Mixed Methods Design

4. **Decide** which mixed methods designs with their rationales best fit the roles of qualitative and quantitative components (i.e. determining consistency)

Mixed Methods Design	Methodological Rationale
1. Sequential <i>Explanatory</i> Design	Complementarity
2. Sequential <i>Exploratory</i> Design	Development, complementarity, and/or expansion
3. Sequential <i>Transformative</i> Design	Complementarity, development and/or expansion
4. Concurrent <i>Triangulation</i> Design	Triangulation
5. Concurrent <i>Nested</i> Design	Complementarity, initiation, and/or expansion
6. Concurrent <i>Transformative</i> Design	Complementarity, initiation, and/or expansion

(Creswell, 2013; Creswell, Plano Clark, Gutmann, & Hanson, 2003; Keele, 2011)

Example

Purpose statement

The purpose of the study is to **determine the relationship between mental health stigma and help seeking behaviors** among teens with mental health problems in a low income neighborhood in Accra, Ghana. In addition, the study will focus on **examining how they seek for help** to address their mental health problems.

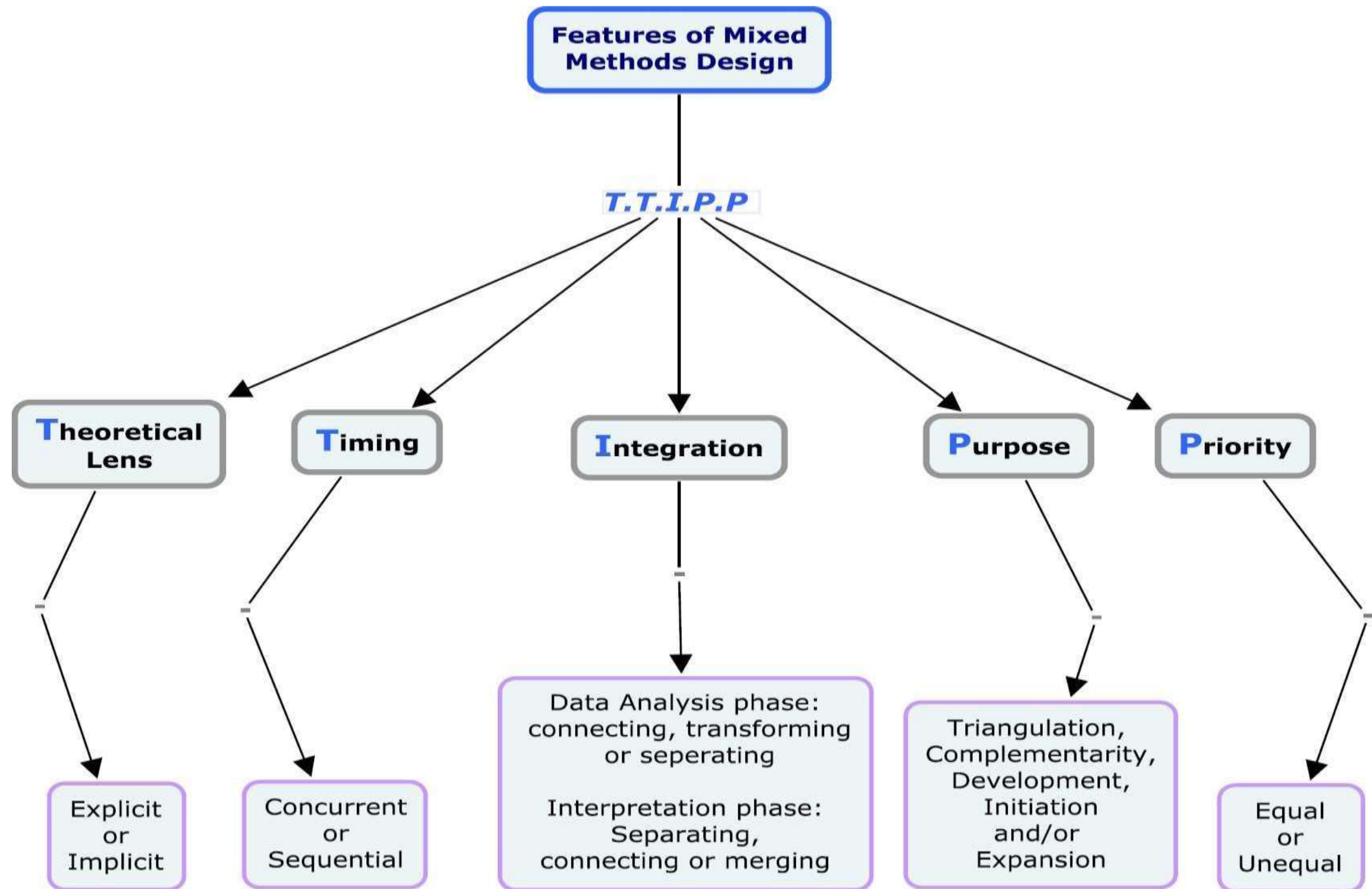
Research Questions

1. Is there a correlation between mental health stigma and help seeking behaviors among teens with mental health problems in a low income neighborhood in Accra, Ghana?
2. How do teens with mental health problems seek for help or mental health services?

Concurrent *Nested* Design (Quan + qual)

Theoretical Lens	Timing	Integration	Purpose	Priority
Implicit	Concurrent	Interpretation stages (<i>merged</i>)	Complementarity	Unequal

Features of Mixed Methods Design



(Hanson, et. al., 2005; Plano Clark & Creswell, 2008)

Features of Mixed Methods Design

Mixed Methods Design	Theoretical Lens	Timing	Integration	Methodological Rationale	Priority
Sequential Explanatory Design	<i>Implicit (Post-positivist lens)</i>	Sequential – beginning with quantitative phase	Data Analysis stage (connected) and Interpretation stage (merged)	Complementarity	Quantitative data
Sequential Exploratory Design	<i>Explicit (constructivist lens)</i>	Sequential – beginning with qualitative phase	Data Analysis stage (connected) and Interpretation stage (merged)	Development, complementarity, and/or expansion	Qualitative data
Sequential Transformative Design	<i>Explicit – advocacy lens</i>	Sequential – beginning with either quantitative or qualitative phase	Data Analysis stage (connected) and Interpretation stage (merged)	Complementarity, development and/or expansion	Either quantitative or qualitative data (Sometimes both...)
Concurrent Triangulation Design	<i>Implicit</i>	Concurrent	Data analysis (separated) and Interpretation stages (merged)	Triangulation	Equal – both quantitative and qualitative data
Concurrent Nested Design	<i>Implicit or explicit</i>	Concurrent	Data analysis (data transformed and/or merged) and Interpretation stages (merged)	Complementarity, initiation, and/or expansion	Unequal
Concurrent Transformative Design	<i>Explicit – advocacy lens</i>	Concurrent	Data analysis (separated) and Interpretation stages (merged)	Complementarity, initiation, and/or expansion	Equal or unequal

(Creswell, Plano Clark, Gutmann, & Hanson, 2003)

Using Mixed Methods Design Decision Tool (MMDDT)

- Using *Mixed Methods Design Decision Tool (MMDDT)* to guide you to choose an appropriate mixed methods design (free to use)
 - https://www.surveymonkey.com/r/Choosing_Appropriate_Mixed_Methods_Design



Philip Adu, Ph.D.
Methodology Expert

National Center for Academic & Dissertation Excellence (NCADE)

ncade.me@thechicagoschool.edu

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