



# Assessment and Measurement

The Clinical/Forensic Context

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# Measurement

- ◆ **Levels of Measurement**
- ◆ **Amount of Information**
- ◆ **Reliability**
- ◆ **Validity**

# Levels of Measurement

**Level**

**Information**

**Nominal**

- **Category Membership**

**Ordinal**

- **Relative Order**

**Interval**

- **Interval Distance**

**Ratio**

- **Relative to Absolute**

# Examination Results

<b>Name</b>	<b>Pass</b>	<b>Grade</b>	<b>Mark</b>
<b>Dolores</b>	<b>P</b>	<b>1st</b>	<b>92</b>
<b>Gawaine</b>	<b>P</b>	<b>1st</b>	<b>70</b>
<b>Finula</b>	<b>P</b>	<b>2.1</b>	<b>69</b>
<b>Percival</b>	<b>P</b>	<b>2.1</b>	<b>68</b>
<b>Jemima</b>	<b>P</b>	<b>2.2</b>	<b>55</b>
<b>Cedric</b>	<b>P</b>	<b>2.2</b>	<b>50</b>
<b>Isolte</b>	<b>F</b>	<b>3rd</b>	<b>49</b>
<b>Heathcote</b>	<b>F</b>	<b>3rd</b>	<b>41</b>
<b>Livia</b>	<b>P</b>	<b>Pass</b>	<b>39</b>
<b>Octavian</b>	<b>P</b>	<b>Pass</b>	<b>12</b>



# Reliability

**Observed = True + Error**



# Problems for Reliability

- **Systematic Error**
- **Inconsistency**
- **Poor Operational Definitions**



# Assessing Reliability

- **Consistency Over Time**
- **Consistency Between Judges**
- **Consistency Between Components**

# Validity

- **Content**
- **Criterion**
- **Construct**

# Going Beyond Self-Report

- **Psychometric Measures**
- **Biosignal Measures**
- **Direct Observation Measures**
- **Idiographic Measures**
- **Qualitative Measures**



# Psychometric Measures

- **Performance Tests**
- **Ratings of Others**
- **Preference Tests**

# Biosignal Measurement

- **Neural Activity**
- **Emotional Arousal**
- **Sexual Arousal**

# Biosignal Problems

- **Instrumentation Problems**
- **Baseline Problems**
- **Validity Problems**



# Idiographic Assessment

- **Repertory Grids**
- **Projective Techniques**
- **Biosignal Measurements**

# Idiographic Measures

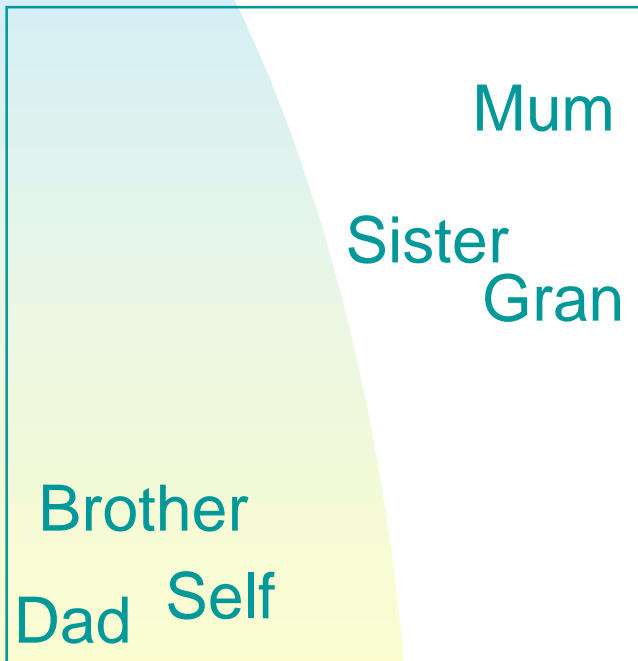
## Advantages

- **Individual Change**
- **Qualitative Focus**
- **Enrich Case Studies**
- **Representations**

## Disadvantages

- **Incomparable**
- **No Generalisation**
- **Resists Quantification**

# A Repertory Grid Analysis





# Direct Observation

- **Systematic Observation**
- **Participant Observation**

# Problems with Observation

- **Ethical Problems**
- **Problems of Reliability**
- **Problems of Generalisation**



# Qualitative Measures

- **Unit of Analysis**
- **Content Domain**
- **Content Analysis**

# Qualitative Measures

## Advantages

- **Potential Breadth**
- **Richness of Data**
- **Unconstrained**

## Disadvantages

- **Subjectivity**
- **Inconclusive**
- **Unconstrained**

# Types of Investigation

- **Experimental Studies**
- **Field Studies**
- **Exploratory Studies**