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JOHNS HOPKINS
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# Section C

## How to Test Validity

# Use of Ethnographic Methods

- Face validity
  - Independent evidence that illness occurs
  - Information on local terms and perceptions
- Content validity
  - Generates information on locally relevant signs and symptoms
- Criterion validity
  - Identifies local criteria and experts

# Local Diagnosis

- Local diagnosis by local people can be used as an alternative to the "gold standard"

- Requires an understanding of local perceptions of mental illness

- Alternative process
  - Determine local equivalent to "disorder"
  - Ask who has/does not have this syndrome
  - Blind interviews
  - Assess relationship discrimination/concordance

# Additional Methods

- Compare with standardized instrument
- Compare with clinical diagnosis
- Compare with functional assessment or other known correlates

# Acholi Psychosocial Assessment Instrument

| Two Tam | Kumu | Par | Kwo Maracao | Ma Lwor |
|---|---|---|---|---|
| ▪ Lots of thoughts<br>▪ Constant worries<br>▪ Pain all body<br>▪ Brain is not functioning<br>▪ Think self is of no use<br>▪ Think about suicide<br>▪ **Talk about problems**<br>▪ **Sits alone**<br>▪ **Lose interest in school**<br>▪ **Get headaches**<br>▪ **Feel sad**<br>▪ **Think of bad things**<br>▪ **Do not care if live or die**<br>▪ **Don't feel like talking**<br>▪ **Forgetful**<br>▪ **Weak**<br>▪ **Cry continuously** | ▪ **Loss of appetite**<br>▪ **Pain in heart**<br>▪ **Sits with cheek in palm**<br>▪ **Cries when alone**<br>▪ **Does not sleep at night**<br>▪ **Talks problems**<br>▪ **Lies down all the time**<br>▪ **Lots of worries**<br>▪ **Headaches**<br>▪ **Feels cold**<br>▪ **Weak**<br>▪ **Doesn't feel like talking**<br>▪ **Disobedient** | ▪ Lots of thoughts<br>▪ **Wants to be alone**<br>▪ **Easily annoyed**<br>▪ **Holds head**<br>▪ **Lost concentration**<br>▪ **Drinks alcohol**<br>▪ Think about suicide<br>▪ **Doesn't greet people**<br>▪ **Sits alone**<br>▪ **Lots of worries**<br>▪ **Doesn't think straight**<br>▪ **Mutters to myself**<br>▪ **Doesn't trust**<br>▪ **Can't do anything to help self**<br>▪ **Insult friends**<br>▪ **Disobedient**<br>▪ **Weak**<br>▪ **Cry continuously** | ▪ **Fights**<br>▪ **Uses bad language**<br>▪ **Is disrespectful**<br>▪ **Misbehaves**<br>▪ **Drink alcohol**<br>▪ **Loses interest in school**<br>▪ **Disinterested**<br>▪ **Deceitful**<br>▪ **A rough person**<br>▪ **Uses drugs**<br>▪ **Disobedient** | ▪ **Clings to elders**<br>▪ **Thinks has no future**<br>▪ **Constantly running**<br>▪ **Doesn't like noise**<br>▪ **Fast heart rate**<br>▪ **Fear being alone**<br>▪ **Loss of appetite**<br>▪ **Wants to be alone**<br>▪ **Does not sleep at night**<br>▪ **Drinks alcohol**<br>▪ **Doesn't greet people**<br>▪ **Thinks people are chasing** |

# APAI: Validity Study

- Validity study implemented with
  - Self-report
  - Caregiver report

- Compared with
  - The Strengths and Difficulties Questionnaire (Goodman, 1997)—standardized Western measure of emotional and behavioral problems in children and adolescents

# Triangulation of Informants

- Use multiple-informants to identify “cases” and “non-cases” and look for agreement

- Informants
  - Caregivers
  - Self

# Determination of Local "Caseness"

- Options for defining "caseness"
  - Both child and caregiver agreed on presence of syndrome for at least one month
  - Caregiver ***or*** child reporting the child having the syndrome for at least one month
  - Both agreeing that syndrome is present—but may differ on which "sub"-syndrome (i.e., one of the three depression syndromes)
  - All cases demonstrated some degree of functional impairment (child reported)

# Psychometric Properties of the Child APAI

- Inter-rater and test-retest reliability
  - Test-retest: r = .84 for the total depression score/total score
  - Inter-rater: r = .84 for the total depression score/r = .74 for total score

# Psychometric Properties of the Child APAI

- Internal consistency reliability
  - Cronbach's alpha coefficients: ranged from 0.67 to 0.85 for each subscale, for a total APAI score of 0.93

# Psychometric Properties of the Child APAI

- Correlations between subscales
  - Depression-like scales and *ma lwor* exhibited positive and high correlations r = 0.57 to r = 0.95
  - Prosocial subscale correlated inversely with the all subscales

# Syndrome-Specific Analyses

| | | | | Concordance | |
|---|---|---|---|---|---|
| | Total | | | Presence of syndrome | Absence of syndrome |
| APAI subscale | Range | Mode | M (SD) | M (SD) | M (SD) |
| Two Tam | 1–43 | 14 | 16.38 (7.69) | 21.36 (7.87) | 13.25 (6.42) |
| Kumu | 0–35 | 10 | 12.58 (6.76) | 15.77 (6.29) | 7.67 (5.06) |
| Par | 0–40 | 10 | 13.58 (7.17) | 16.24 (6.86) | 7.75 (5.78) |
| Ma lwor | 0–29 | 6 | 8.62 (4.79) | 10.47 (4.88) | 6.49 (4.05) |
| Kwo Maraco | 0–21 | 0 | 2.34 (3.13) | 7.03 (5.15) | 1.79 (2.35) |
| APAI total depression* | 2–87 | 30 | 32.07 (15.55) | 37.20 (14.75) | 16.64 (10.05) |
| APAI total score** | 3–125 | 31 | 39.79 (19.19) | 45.54 (18.70) | 20.89 (11.88) |

*1 out of 3 depression syndromes
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# Use of Validation Data

1. Evaluate the psychometric properties of the instrument (using full sample screened, N=667)

2. Generate cut-off score for study eligibility (N=178)

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# Consequences of Lack of Validity

- Misclassification
- Incorrect intervention selection
- Inadequate evaluations

# Summary

- Adaptation includes identifying equivalent terms and phrases and selecting local items that might not appear in the standard measure

- Validation is difficult—without a gold standard, it is necessary to use multiple methods to test different types and criteria