



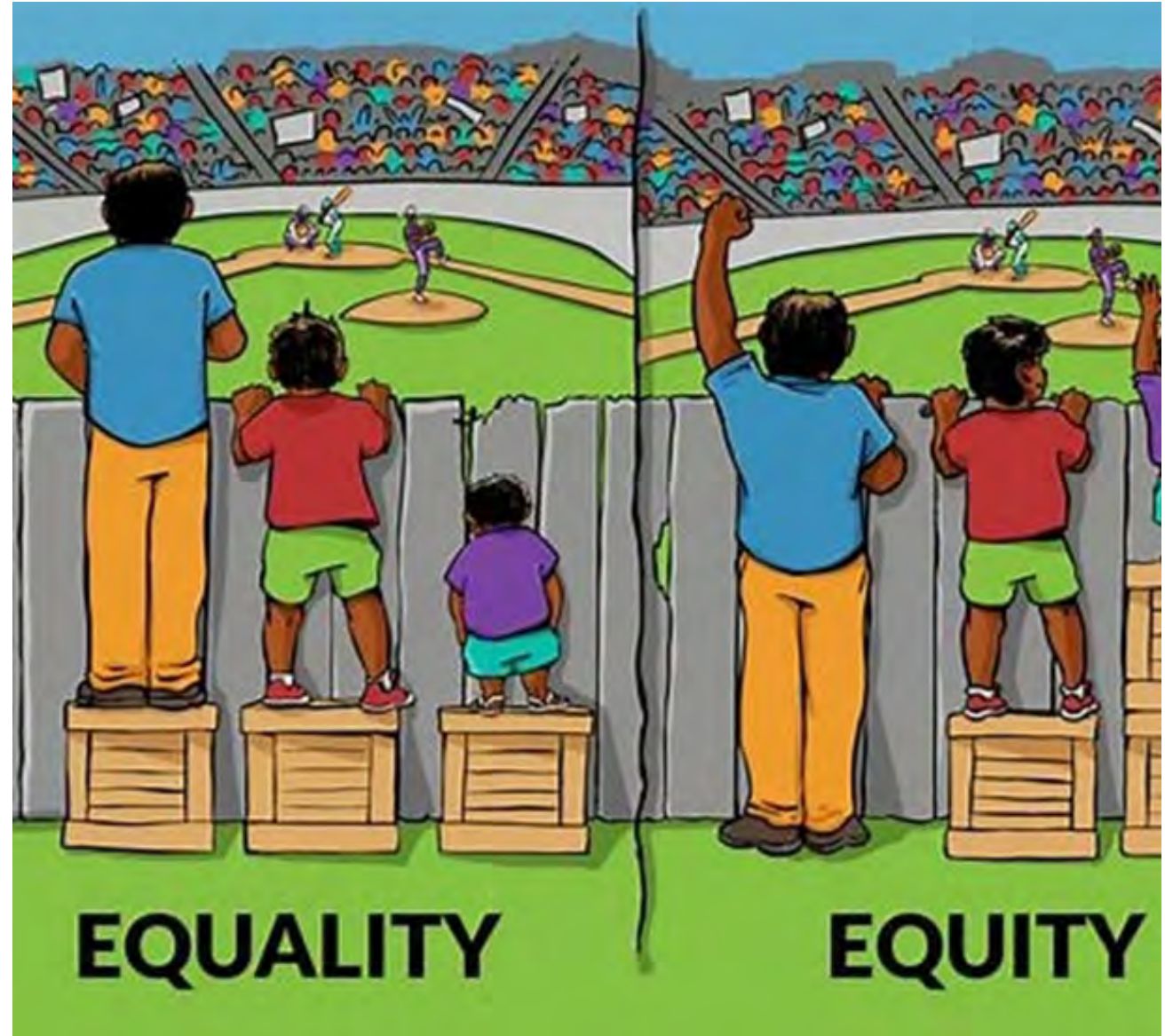
CULTURAL BIAS IN PSYCHOLOGICAL/PSYCHOMETRIC ASSESSMENT: FACILITATING ACCURACY, EQUALITY AND EQUITY IN DIAGNOSTIC OUTCOMES

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EQUALITY VS EQUITY

- **EQUALITY:** PROVIDING SAME RESOURCES AND TREATMENT TO EVERYONE
- **EQUITY:** FAIRNESS AND JUSTICE IN THE WAY PEOPLE ARE TREATED.



**PSYCHOLOGICAL/PSYCHOMETRIC
ASSESSMENTS GENERALLY BASED
ON EQUALITY”**

- **Standardised tests/interview schedules, mainly from the USA**
 - **Standardised “Western” normative data**
 - **Standardised assessment conditions**
 - **Rooms**
 - **Instructions**
 - **Timings where applicable**
 - **Standardised protocol, eg pass/fail criteria**
 - **Standardised diagnostic criteria, e.g. DSM-5-TR**

 - **Leading to....**
- 

CULTURAL BIAS

- THE TENDENCY OF PEOPLE TO ASSESS OTHERS ON THE BASIS OF THEIR OWN BACKGROUND AND CULTURE, ETHNICITY OR OTHER SOCIAL CONSTRUCT.
- BIAS MAY BE UNCONSCIOUS
- BIAS HINDERS EQUITABLE ASSESSMENTS:
- Considerable differences in the “circumstances” of children globally: e.g.,
 - the environments they inhabit,
 - the toys and materials with which they can play,
 - their access to formal or informal early learning opportunities,
 - the relative value placed on different developmental milestones and the manner in which these skills are utilised.



“I AM I AND MY CIRCUMSTANCE”: Jose Ortega y Gasset

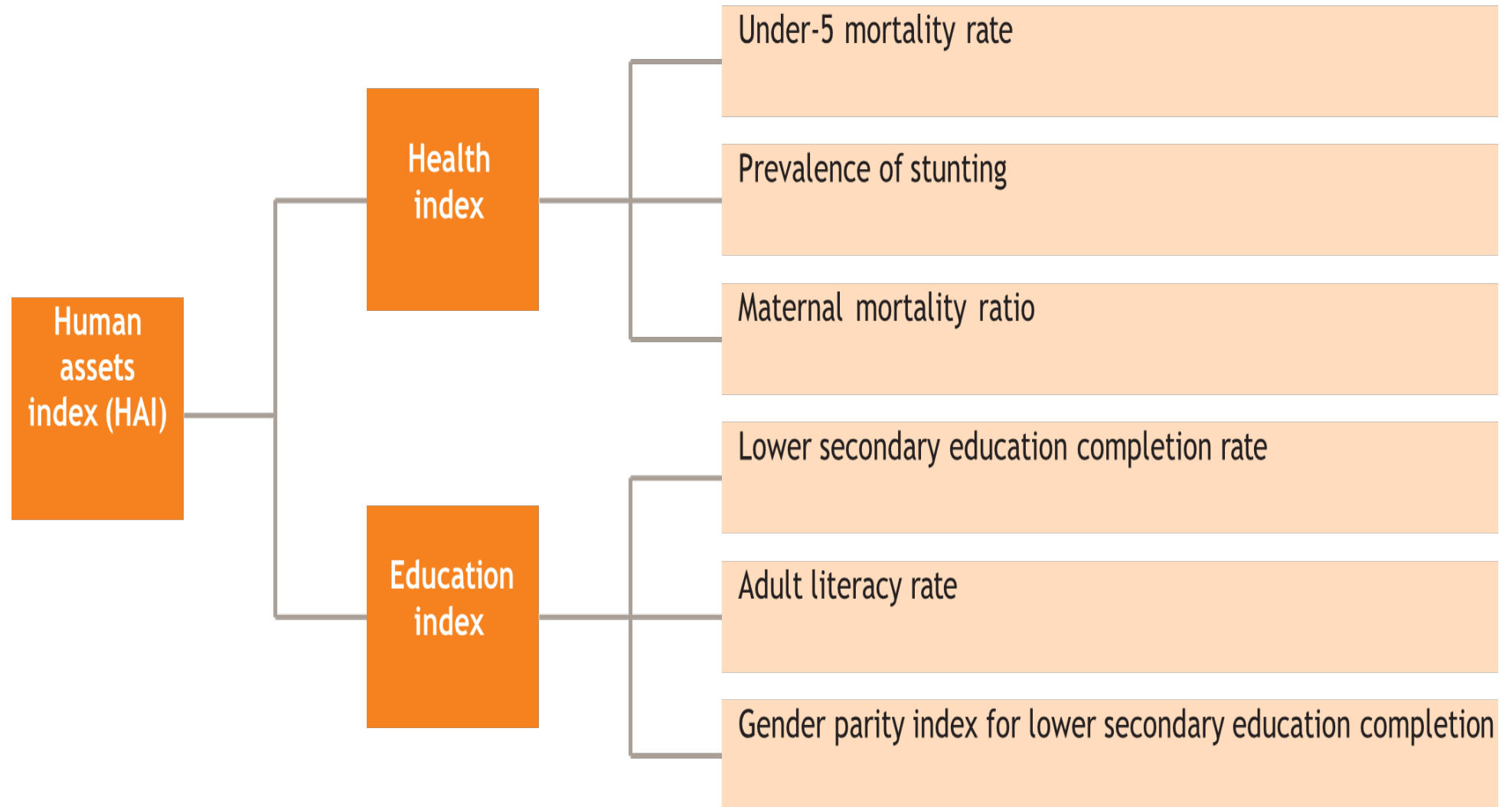
OUR AUSTRALIAN CIRCUMSTANCES



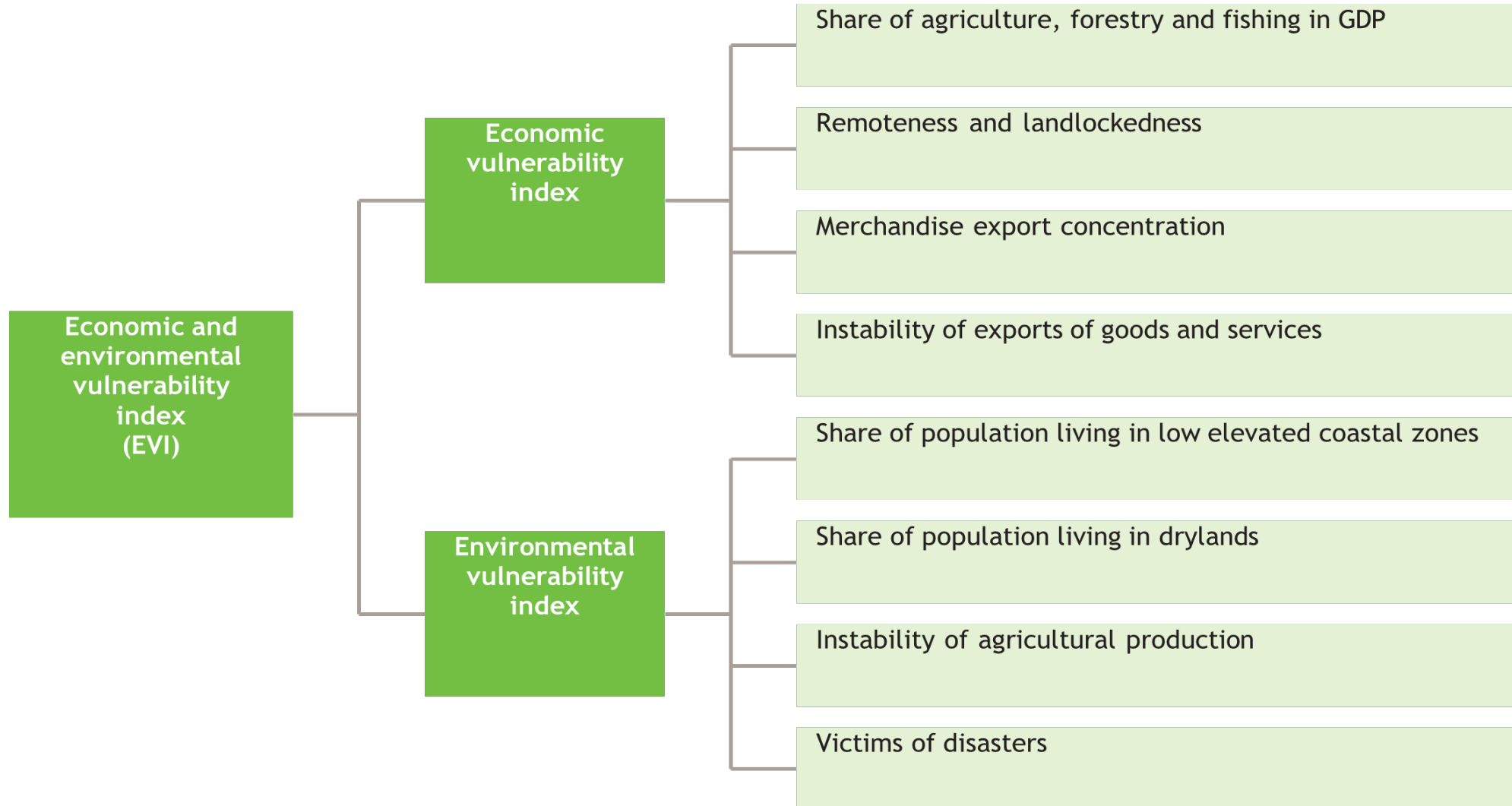
“CIRCUMSTANCES” IN “LESS DEVELOPED COUNTRIES”



LDC HUMAN ASSETS INDEX



LDC ENVIRONMENTAL VULNERABILITY INDEX



CHILDREN IN LESS DEVELOPED COUNTRIES

**SUBJECT TO MORE EARLY
“DEVELOPMENTAL COMPROMISE” DUE
TO SUCH FACTORS AS**

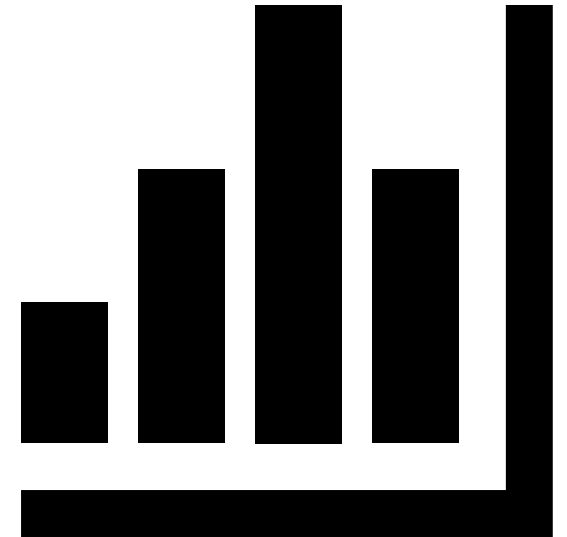
- **LACK OF EXPERT MEDICAL CARE AND FOLLOW-UP,**
- **MALNUTRITION,**
- **ILLNESS AND DISEASE.**

**FAR LESS OPPORTUNITY TO ATTEND
EARLY CHILDHOOD PROGRAMS SUCH AS
DAY CARE CENTRES, NURSERIES,
PRESCHOOLS OR KINDERGARTENS.**

- **IN 2019 ONLY HALF OF THE WORLD’S PRESCHOOL-AGE CHILDREN WERE RECEIVING PRESCHOOL EDUCATION.**
- **175 MILLION CHILDREN WERE NOT ENROLLED IN PRE-PRIMARY EDUCATION DURING THEIR EARLY YEARS.**
- **IN UNDER- DEVELOPED COUNTRIES, 78% OF CHILDREN WERE MISSING OUT ON PRESCHOOL OPPORTUNITIES.**

GLOBAL STATISTICS- NEURODEVELOPMENTAL DISORDERS

- **~53 million children with neurodevelopmental disorders**
- **~50 million of which from low to middle income countries**
- **~250 million children under 5 yrs with “sub-optimal development”**
- **~80 million with low cognitive / social development**
- **~95 % of ch’n with ASD in low / middle income countries**
- **~ 175 million children in LDC’s not receiving preschool**
- **45 “Less Developed” countries**





Benin-Burkina Faso-Burundi-Central African Republic-Chad-Comoros-Democratic Republic of the Congo-Djibouti-Eritrea-Ethiopia-Gambia-Guinea-Guinea-Bissau-Lesotho-Liberia-Madagascar-Malawi-Mali-Mauritania-Mozambique-Niger-Rwanda-Sao Tome & Principe-Senegal-Sierra Leone-Somalia-South Sudan-Sudan-Togo-Uganda-United Republic of Tanzania-Zambia

BARRIERS TO ASSESSMENT AND DIAGNOSIS IN LDC'S

- **Lack of appropriate medical / paediatric / psychological services**
- **Family / tribal isolation**
- **Lack of financial resources / poverty / subsistence**
- **Lack of treatment options**
 - **Therapists**
 - **Special schools and programs**
- **Cultural attitudes and beliefs**
 - **Curses / retribution / poor parenting / promiscuity**
 - **Societal stigma / ostracization / shame / loss of dignity / loss of opportunity**
 - **Guilt and shame**
 - **Suspicion of “western” medicine and specialists**



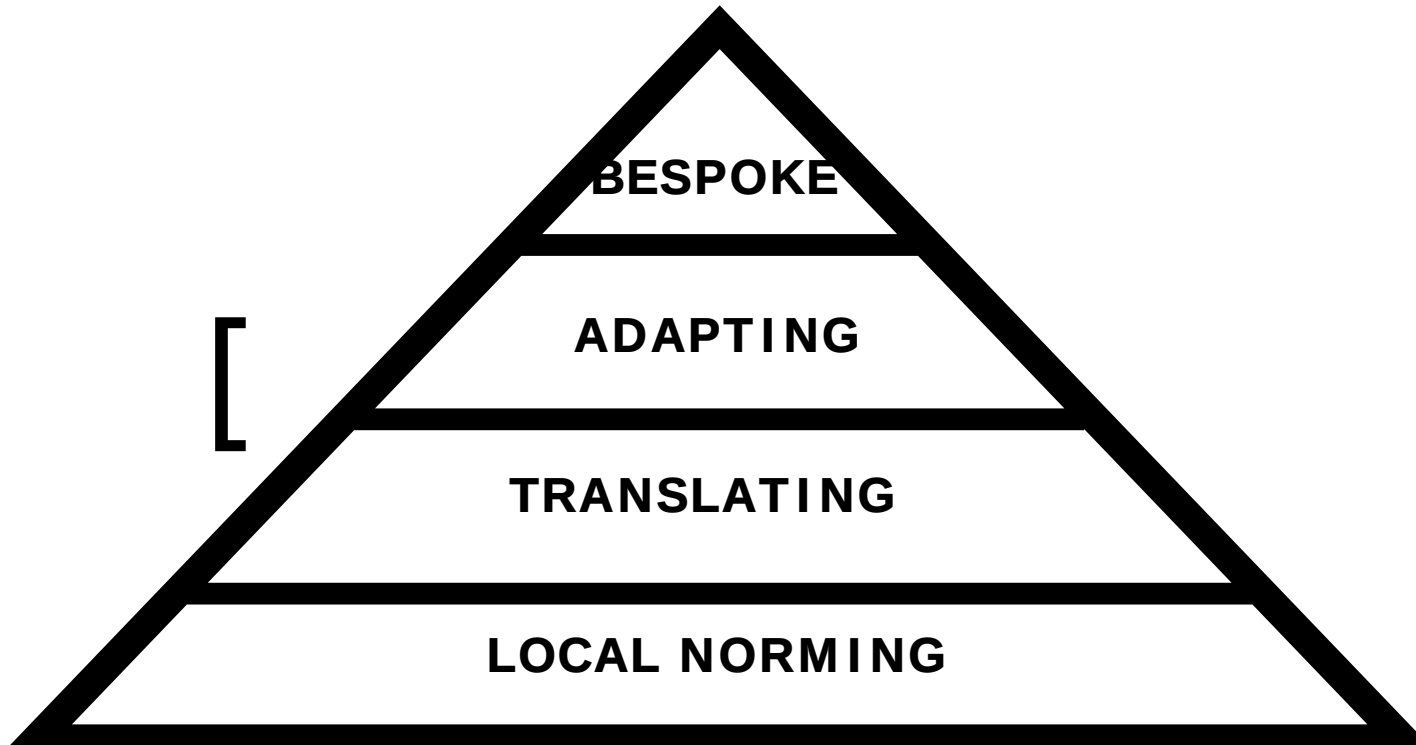
REDUCING THE INEQUITY

- “Re-norming” standardised tests on local populations without changes to test items or materials.
- Changes to language and instructions to suit indigenous languages.
- Substitution of equipment such as toys with more familiar materials.
- The introduction of more culturally appropriate and valid test items based around the lives and circumstances of particular populations.
- The development of entirely new assessment tools for specific populations.

Thus:

- o **Adoption:** a close translation of an instrument in a target language.
- **Adaptation:** a combination of a close translation and a change of other stimuli (eg test materials).
- **Assembly:** The compilation of a new test instrument.

RENORMING, ADAPTATION, TO “BESPOKE” ASSESSMENTS



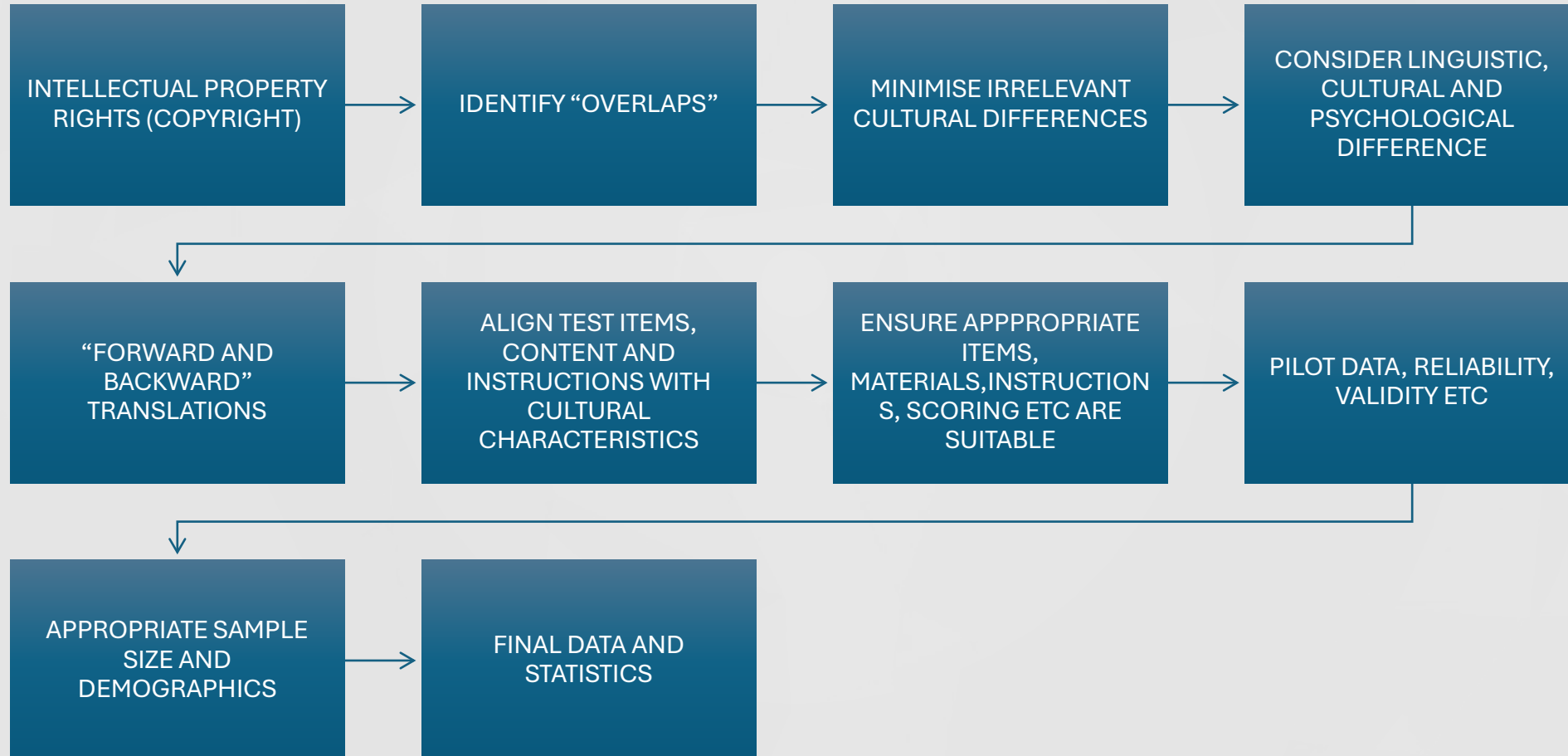
HISTORICAL EXAMPLES

- **Jerome Sattler's adapted Stanford-Binet LM subtests for children with cerebral palsy.**
- **The Snijders-Oomen Nonverbal Intelligence Test for children with severe hearing difficulties**
- **The Queensland Test (QT), Australian non-verbal assessment for Indigenous Australians.**
- **Bayley-3 SN (Special Needs, Netherlands)**

**“ECLECTIC” MODEL OF
TEST DESIGN
(DARYL FUJII, CLINICAL
NEUROPSYCHOLOGIST)**

- **“ECLECTIC,” standing for:**
- **E: Education and literacy**
- **C: Culture and acculturation**
- **L: Language;**
- **E: Economics**
- **C: Communication**
- **T: Testing situation, comfort and motivation**
- **I: Intelligence conceptualization**
- **C: Context of immigration**

INTERNATIONAL TEST COMMISSION (ITC) GUIDELINES



EXAMPLES OF ADAPTED TESTS

Assessment	Country of Origin
Ages and Stages for China ASQ-C	China and Indigenous Australia
ADOS-2	Afrikaans,Portuguese, Taiwan, UK for visually impaired
BRIEF2 for Russia	Russia
Children Neuropsychological And Behavior Scale (CNBS-R2016), China	China
(DASII)	India
Gilliam Autism Rating Scale-3 rd Edition	Mainland China
Griffiths Development Scales	China
International Clinical Epidemiology Network Diagnostic Tool for autism spectrum disorder (Indt-ASD)	India
KABC-II	Malawi
M-CHAT-R/FM	Northern Sotho
RADS-R Autism Spectrum Screening Questionnaire	Germany
Ritvo Autism and Asperger Diagnostic Scale: Revised (RAADS-R)	Iran
Social Responsiveness Scale	Germany, Taiwan

EXAMPLES OF “BESPOKE” TESTS

Assessment	Country of Origin
The Brief Observation of Symptoms of Autism	Argentina and Chile
Child Development Assessment Questionnaire (QAD-PIPASS)	Brazil
Children Neuropsychological And Behavior Scale (CNBS-R2016)	China
World Health Organisation Disability Assessment Schedule for Children	Pakistan
Global Scales For Early Development (GSED) For Children	World Health Organisation
Indian Scale For Assessment of ASD (ISAA)	India
International Clinical Epidemiology Network Diagnostic Tool for autism spectrum disorder (INDT-ASD)	India
Kilifi Developmental Checklist (KDC) and Kilifi Developmental Inventory	Kenya
Trivandrum Development Screening Chart	India

NEURODEVELOPMENTAL DISORDERS AMONGST INDIGENOUS AUSTRALIANS IN REMOTE SETTINGS: A SORRY TALE

**Indigenous children in
urban, rural and remote
Australia:**

- Increased risk of adverse neurodevelopmental outcomes, eg:
 - Cerebral Palsy
 - FASD
 - Autism Spectrum Disorder
- 30 % more likely to have physical disabilities such as cerebral palsy
- Higher risk of developmental and intellectual difficulties
- Prevalence of neurodevelopmental disorders as high as 30 % of the paediatric population



**FURTHER
DETAILS AND
DISCUSSION
IN.....**

THANKS YOU

