Introduction

- Symbolic Play Test (SPT)
  - an assessment which indicates the child’s early mental process which precede receptive and expressive verbal language
  - helps in differentiating children who have developed sufficient concepts and symbols in play and those who have failure to develop language.

  (Lowe & Costello, 1988)

Aims

- To test the agreement between results of SPT and Griffiths Mental Development Scales – Extended Revised (GMDS-ER) in our Malaysian culture
- To test inter-rater agreement between scorings of nurses and the speech-language therapist

GMDS-ER

- One of the golden standard of developmental assessment.
- Measure development trends which are significant for development, or indicative of functional mental growth in young children from birth to a developmental age of eight years.
- There are 6 subscales assessed:
  - Locomotors
  - Personal-Social
  - Hearing and Language
  - Eye and Hand Coordination
  - Performance
  - Practical Reasoning (above 2 years)
Methodology

- Cross-sectional study

- Children recruited from local Mother-and-Child Health Clinics and kindergarten.

- Registered with National Medical Research Register and approved by Medical Review Ethics Committee on 6th March 2012 (NMRR-12-16-10787)

Inclusion Criteria

Parents or carers who fulfilled the following criteria:

1. Being the main carer of the child
   - Spent time with the child at least 5 hours a day during the day time &/or during the evening time.
   - Participated in taking care of child's daily living needs (i.e. bathing, changing, preparing meals, supervising play activities, getting ready to sleep etc.).
   - Stayed with the child for an average 6 days per week (in the same house).

2. Gave informed consent.

3. The child aged between 1 and 3 years old

Exclusion Criteria

1. Parents or carers who said that they could not read and write Bahasa Malaysia or Mandarin.

2. Children that was diagnosed with any developmental disorder (e.g. Down Syndrome, Cerebral Palsy, Global Developmental Delay).

Methodology

- SPT:
  1. Scorings were done by SLT and Nurse independently
  2. Scorings were compared
  3. Consensus of the scoring was achieved.

Results

- Children underwent GMDS-ER – results of SPT (in age equivalent) compared to GMDS-ER overall score as well language component of the GMDS-ER.

- SPSS 20.0
71 recruited for SPT (children aged 1-3 years old)

61 children eligible and participated in the SPT

47 children underwent SPT by SLT & Nurse; 14 children underwent SPT by Nurse only (due to logistic problem)

children underwent GMDS-ER; 1 child refused to participate

**Agreement between SPT and GMDS-ER (Age Equivalent in months) n=60**

- GMDS-ER
  - ICC 0.52, 95% CI 0.31 to 0.68

- Language component of GMDS-ER
  - ICC 0.15, 95% CI -0.11 to 0.39

**Agreement between SLT and Nurses (Raw Scores) n=47**

- ICC 0.98, 95% CI 0.96 to 0.99 (p < 0.001)
Discussion

- SPT could be used to indicate whether a child has developmental delay

- A study done by Lyytenin, Poikkeus and Laakso (1997), where results of SPT were correlated with the Reynell Developmental Language Scales. However, our result did not support this.

- Scorings done by the nurses were consistent with those by SLT.

Interesting Observation

- Children enjoyed the toys provided by the kit

- Children were afraid of the doll in Situation 1

- Some children were observed to put the saucer on the cup

Doll in Situation 1

Conclusion

1. Moderate agreement between age equivalent of SPT and that of GMDS-ER

2. No agreement between age equivalent score of SPT and the language component of GMDS-ER

3. Strong agreement between the raw scores by the speech-language therapist and nurses.

Limitation

- Dolls itself for situation 1 – cultural inappropriateness?

Recommendation

- In settings with poor resources, SPT can be an easy-to-use tool by nurses

- To assess young children’s early mental process which precede receptive and expressive verbal language;

- To identify those at risk of developmental delay.

- Replace the doll in Malaysian setting?
References


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Thank you