Developing valid measures of parent-child relationships in Uganda, combining emic and etic constructs

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Introduction

- There is considerable evidence showing that family influences, particularly parenting, have a major influence on young people’s lives.

- Parent-child relationships are important. Although many parenting interventions are being delivered in East Africa, few have been rigorously evaluated.

- There is lack of culturally appropriate, well validated measures of parent-child relationships since many interventions have been developed in HICs.
Aim

- To develop valid parental and child self-report measures of generic dimensions of parent-child relationships in SSA in order to:
  - Investigate how these dimensions are related to child outcomes
  - Evaluate parenting interventions robustly
We are trying to clarify:

• Response options suitable for semi-literate populations

• Social desirability biases

• The minimum age for surveying children

• How to interpret inconsistencies between parent and child reports

• Whether etic parenting dimensions from the North are appropriate in SSA
Study setting

- Conducted fieldwork from November 2012 in 2 parishes in Wakiso district, Central Uganda

- Peri-urban and rural populations

- Variety of occupations: formal employment, fishing, subsistence farming, trading

- Mixed ethnicity
Methods: stages of the project

1. Exploratory semi-structured interviews

2. Draft questions and cognitive testing

3. Pilot first draft full questionnaires for parents and children

4. Revise questionnaires following checks and factor analyses
   - Cognitive testing of new questions

5. Pilot second draft full questionnaires for parents and children

6. Revise questionnaires following checks and factor analyses
   - Cognitive testing of new questions

7. Administer third draft full questionnaires for parents and children

8. Test-retest for reliability: repeat questionnaires with same sample one month later
1. Exploratory semi-structured interviews

- Explored local concepts to describe parent-child relationships
  - 10 parents (5 mothers, 5 fathers) of 10-14 year olds; 3 practitioners implementing parenting programmes

- Main findings:
  - Parenting very pertinent issue for parents
  - Great variation between parents in how treated their children
  - Parenting roles highly gendered
    - fathers seen to play minimal role in child care, mainly providing financial support

- Caring for children demonstrated through:
  - material provision
  - teaching obedience and respect
  - encouragement at school

- Many parents attributed bad behaviour of their children to external influences

- Community/collective parenting valued, though ‘competitive’ parenting on increase
2. Draft questions and cognitive testing

- Drafted questions for parents and for children aged 10-14
  - Adapted existing measures and wrote new ones
    - Drew on Pianta Scale, Alabama Parenting Questionnaire, WHO Gender Based Violence questionnaire, etc.
    - Trying to capture indigenous constructs of parenting: material provision; developing respectability; encouraging education; collective parenting.
  - Administered questions to 10 parents and 10 children
  - Checked appropriateness, length, translation and comprehension
  - A week later, interviewed the same parents and children about their understanding of the questionnaire
    - length of questionnaire, cultural appropriateness, translation, matching questions for parent and child.
  - Questionnaire revision
3. Pilot first draft full questionnaires for parents and children

- Random sample of 100 parent-child dyads across 2 villages: parents with child aged 10-14

- Data entered in STATA:
  - Checks for ceiling effects
  - Checks for response consistency
  - Factor analyses for factor loading
4. **Revise questionnaires following checks and factor analyses**

- Further questionnaire revision based on factor analyses

- Conducted feasibility and cognitive testing of the new questions in another site to check for:
  - Appropriateness
  - Length
  - Translation
  - Comprehension

- After one week interviewed the same parents and children about their understanding of the questions

- Minor adjustments to the questionnaire
5. Pilot second draft full questionnaires

- A random sample of 100 parent-child dyads across 2 new villages: parent with child aged 10-14

- Data entered in STATA:
  - Checks for ceiling effect
  - Checks for response consistency
  - Confirmatory and exploratory factor analyses for factor loading
    - Subscales hidden within larger scales
    - Better results when restrict analyses to mothers
6. **Revise questionnaires following checks and factor analyses**

- Alpha coefficients of >0.5 considered acceptable, given very small sample size
- Improved alphas by excluding poorly loading items in some scales

**Table 1: Final constructs in children’s questionnaire**

<table>
<thead>
<tr>
<th>Construct</th>
<th>No. of items</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parental connectedness to child</td>
<td>7</td>
<td>0.73</td>
</tr>
<tr>
<td>2. Child’s emotional relationship with parents</td>
<td>5</td>
<td>0.64</td>
</tr>
<tr>
<td>3. Positive parenting/discipline</td>
<td>4</td>
<td>0.53</td>
</tr>
<tr>
<td>4. Provision for child’s necessities</td>
<td>4</td>
<td>0.68</td>
</tr>
<tr>
<td>5. Behavioural control: harsh parenting</td>
<td>5</td>
<td>0.71</td>
</tr>
<tr>
<td>6. Behavioural control: parental monitoring</td>
<td>6</td>
<td>0.75</td>
</tr>
<tr>
<td>7. Behavioural control: child’s obedience and respect</td>
<td>4</td>
<td>0.68</td>
</tr>
<tr>
<td>8. Parents’ psychological control</td>
<td>4</td>
<td>0.62</td>
</tr>
<tr>
<td>9. Parents’ respect for child’s autonomy</td>
<td>5</td>
<td>0.63</td>
</tr>
<tr>
<td>10. Parents modelling good behaviour</td>
<td>3</td>
<td>0.57</td>
</tr>
<tr>
<td>11. Parents modelling parental conflict</td>
<td>3</td>
<td>0.68</td>
</tr>
<tr>
<td>12. Parent-child communication about sex</td>
<td>3</td>
<td>0.50</td>
</tr>
</tbody>
</table>
### Table 2: Final constructs in parents’ questionnaire

<table>
<thead>
<tr>
<th>Construct</th>
<th>No. of items</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parental connectedness to child</td>
<td>7</td>
<td>0.74</td>
</tr>
<tr>
<td>2. Parent-child conflict</td>
<td>5</td>
<td>0.77</td>
</tr>
<tr>
<td>3. Provision for child’s necessities</td>
<td>4</td>
<td>0.60</td>
</tr>
<tr>
<td>4. Behavioural control: harsh parenting</td>
<td>4</td>
<td>0.75</td>
</tr>
<tr>
<td>5. Behavioural control: parental monitoring</td>
<td>4</td>
<td>0.62</td>
</tr>
<tr>
<td>6. Behavioural control: establishing obedience and respect</td>
<td>4</td>
<td>0.43</td>
</tr>
<tr>
<td>7. Behavioural control: perception of child’s obedience and respect</td>
<td>3</td>
<td>0.56</td>
</tr>
<tr>
<td>8. Parents’ psychological control</td>
<td>3</td>
<td>0.54</td>
</tr>
<tr>
<td>9. Parents’ respect for autonomy</td>
<td>3</td>
<td>0.53</td>
</tr>
<tr>
<td>10. Parents modelling good behaviour</td>
<td>3</td>
<td>0.58</td>
</tr>
<tr>
<td>11. Parents modelling parental conflict</td>
<td>4</td>
<td>0.79</td>
</tr>
<tr>
<td>12. Parental conflict: communication</td>
<td>5</td>
<td>0.86</td>
</tr>
<tr>
<td>13. Parental conflict: violence</td>
<td>4</td>
<td>0.69</td>
</tr>
<tr>
<td>14. Parent’s attitudes to gender based violence</td>
<td>4</td>
<td>0.53</td>
</tr>
<tr>
<td>15. Parent-child communication about sex</td>
<td>3</td>
<td>0.65</td>
</tr>
<tr>
<td>16. Parenting self-efficacy</td>
<td>4</td>
<td>0.52</td>
</tr>
</tbody>
</table>
Measures of connectedness that work best for parent and child questionnaires

Table 3: Parents’ Questionnaire

<table>
<thead>
<tr>
<th>Questions on connectedness</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you play with your child X?</td>
<td>0.72</td>
</tr>
<tr>
<td>How often do you get to know your child X’s friends?</td>
<td>0.71</td>
</tr>
<tr>
<td>How often do you talk to your child X’s friends?</td>
<td>0.71</td>
</tr>
<tr>
<td>How often do you hug your child X?</td>
<td>0.65</td>
</tr>
<tr>
<td>How often do you show your child X affection/love?</td>
<td>0.54</td>
</tr>
<tr>
<td>How often do you ask your child X about her day?</td>
<td>0.54</td>
</tr>
<tr>
<td>How often do you listen to your child X?</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Table 4: Children’s Questionnaire

<table>
<thead>
<tr>
<th>Questions on connectedness</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you are upset, how often does your female parent figure comfort you?</td>
<td>0.71</td>
</tr>
<tr>
<td>How often does your female parent figure ask about your day?</td>
<td>0.63</td>
</tr>
<tr>
<td>How often do you play games or do other fun things with your female parent figure?</td>
<td>0.56</td>
</tr>
<tr>
<td>How often does your female parent figure hug you?</td>
<td>0.67</td>
</tr>
<tr>
<td>How often does your female parent figure give you useful advice when you need it?</td>
<td>0.50</td>
</tr>
<tr>
<td>How often does your female parent figure have conversations with you?</td>
<td>0.57</td>
</tr>
<tr>
<td>When you have a problem, how often does your female parent figure try to find out what is wrong with you?</td>
<td>0.56</td>
</tr>
</tbody>
</table>
7&8. Test-retest for reliability

- Currently administering the 3rd full draft questionnaires with 50 parent-child dyads in the new parish

- After one month, they will be asked to complete exactly the same questionnaire a second time

- Test-retest for reliability will be assessed in terms of the intraclass correlation coefficient
**Conclusion**

- Validity of measures will be judged by:
  - internal consistency
  - reliability overtime
  - associations between reported parent-child relationships and child outcomes (Strengths and Difficulties Questionnaire)
  - Associations between parent and child reports

- Main challenge:
  - very long process to develop suitable measures.
Remaining challenges

- Measuring ‘social distribution of parenting’ (Robert Serpell)
  - go beyond biological parents to ‘Female parent figure’ and ‘Male parent figure’
  - but only scope to collect data on one carer of each sex.

- Not successful in developing measures for indigenous constructs of:
  - collective parenting
  - Establishing obedience and respect (very low alpha 0.43)

- Not successful in developing measures of etic constructs of:
  - positive parental discipline
  - child disclosure to parents
  - gendered socialisation

- Can consistency between parent and child reports of parent-child relationship be used as a measure of validity?
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- MRC/CSO SPHSU, University of Glasgow
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- Study team