Reviewer’s report

Title: The Cost of Being an Orphan: Psychosocial Well-being and Cognitive Development among Orphans and Abandoned Children in Five Low Income Countries

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Reviewer: marian bakermans-kranenburg

Reviewer’s report:

The current paper describes the correlations between traumatic life events, emotional difficulties, and cognitive development in a multi-site sample of children aged 6-12 years in five low-income countries.

Strength of the study is the administration of a culturally sensitive cognitive test, and interviews about life events in a 3-year longitudinal design. The authors should be commended with regard to the effort they put in collecting these data.

Weaknesses of the current study are the following:

As noted, we cannot infer any causal link from the current paper. This is a crucial problem. Emotional difficulties could result in lower cognitive performance or the other way around. That they often go together is not new.

The use of the term orphans to refer to children who lost one parent but live with their other biological parent is confusing. It is perhaps not incorrect in a purely linguistic respect, but the common sense for the definition of orphan is a child without any biological parent who is alive. In the current paper, it is the majority of ‘orphans’ who are children living with their biological parent (>40% of the total sample, >60% of the ‘orphans’). The fact that single orphans living with parents were less likely to drop out further underscores the lack of comparability between the orphans and children living with one biological parent.

The children were between 6 and 12 years old at baseline. Emotional difficulties were self-reported, but children did not self-report on the SDQ until they were 11 years old (p8). A large and non-random body of missing data is thus implied.

A serious problem with self-reported data on emotional difficulties in the current sample is that children in the current sample, because of their dependency on whoever is willing to take care of them, cannot run the risk of reporting honestly about the problems they experience. This may well be an explanation for the finding that orphaned and abandoned children in Nagaland reported lower rates of difficulties than comparison children living with both parents (p7), but raises questions as to the systematic and unsystematic biases inherent to the method.

No alphas (reliability) for the SDQ scales have been reported.

Were research assistants who administered the cognitive tests unaware of the
status (orphan, abandoned, etc) of the children?

What was the correlation between the KABC-II and the CVLT-C?

I do not see a reason to adopt the $p = .10$ as alpha level in Tables and analyses. The number of analyses would rather warrant Bonferroni-corrected alpha levels.

p 9: “As a predictor of emotional difficulties, financial stability may help provide the child with a better chance of overcoming the psychosocial challenges…” I guess I know what is meant, but this does not sound well.

The conclusion is phrased in causal terms: “exposure to trauma, including and in addition to the loss of a parent, is associated with higher emotional difficulties, and increases in emotional difficulties, in turn, are associated with lags in cognitive development.” (p10) It can’t be.

p9: “The child’s performance on the KABC tests is not only an indication of the child’s ability or IQ, but also a variety of other factors associated with motivation, self-confidence, response to authority and the child’s developed non-verbal skillset [31-2]. We may interpret the variation on test scores with the child’s emotional difficulties to be related to changes in these additional factors.” I agree, and this would easily explain the association between emotional difficulties and KABC as reported in the current paper. But that also means entanglement of the measures, and we do not know what proportion of variance in ‘real’ or ‘pure’ cognitive development is left to be explained by emotional difficulties. In combination with the design that does not allow for establishing causality, I am not sure what new insights the current study has to offer, in particular into “the relationship between psychosocial factors, resource constraints and the cognitive development of orphans” (p10).

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests