Author’s response to reviews

Title: Prevalence of behavioral disorders and Attention deficit Hyperactive disorder among school going children in Southwestern Uganda

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Provide list of Abbreviations in the Declaration

Response: Thanks for these technical comments. A list of abbreviations was included in the previous revisions on page 9.

Change heading "Introduction" to "Background"

Response: Changed to Background first line on page 3

Change heading "Methodology" to "Method"

Response: Changed to Method first line on page 4.

Comment: The location of the school was noted but no analysis undertaken to see if there were differences between the different locations.
Response: Thank you for this comment. A table with the analysis of different locations and prevalence of DBDs and ADHD had been included.

Comment: No information was reported on the different age groups assessed by the team.

Response: Thank you for this comment. A table has been included. The study population has been divided into 2 groups 8-10 and 11-13 years and the prevalence of ADHD and DBDs computed.

Comment: It was also noted by the team that there were high rates of HIV in this area and also high levels of poverty yet these do not seem to have been examined.

Response: Thanks for the comment. We recognize that the prevalence of HIV is particularly high in this region. However, for this particular study, we did not examine HIV prevalence rate and poverty. The results described in this study are derived from the baseline screening measures which focused on understanding the prevalence of behavioral disorders among school going children. Further our assessment batteries did not capture information on HIV status and income of participants. As a result, it is difficult to assess its impact on the prevalence of behavioral disorders.

Comment: All of the measures are caregiver reported assessments. Were there any self-report measures undertaken by the children? If so, how does these correlate with the caregivers' assessments? Is there information that could be provided about the caregivers? How many caregivers were approached but did not participate? Are there differences between different groups of caregivers? How many caregivers reported more than 1 child as scoring positively on the scales? Were there any consistencies between the caregivers in the impairment domains where concern was expressed?

Response: Thank you for this comment. Data presented in this study comes from parent/caregiver assessment of their children using measures described in the Method section. For this paper we did not look at caregiver characteristics. These will be reported in papers that will focus on the longitudinal data.

Comment: It is mentioned that there is a dearth of epidemiological studies looking at the prevalence of behavioural disorders within sub-Saharan Africa (pg 3 L32) yet it appears that a number of studies have reported prevalence rates on Pg 3 L36-43 and Pg 6 L13-33.
Response: Thank you so much for the comment. We have not changed this section because, we explicitly stated that all existing epidemiological studies were conducted with clinical samples (participants already diagnosed with HIV or a neurological disease). As a result, they are more likely to report high prevalence levels of behavioral problems—given that this would be a self-selected population. In addition, we reported prevalence rates on page 3 L35 from three studies conducted in sub Saharan Africa using non-clinic samples. However, we also recognize the huge diversity across cultures even within the same geographical boundaries, as such three studies might not provide a full picture of the prevalence of behavioral disorders among children.

Comment: Setting - It would be helpful if more information could be given about the Greater Masaka area as many readers will not know this area. Some further information about the education system would also be useful (i.e. what do Grades 2 to 7 represent in terms of educational level).

Response: Thanks for your comment. In methods section Line L8 and L16, we have added content to expound on the study setting and education system in Uganda. The revision includes the following. The five geopolitical districts in southern Uganda include Masaka, Rakai, Kalungu, Lwendo and Kyotera districts. This area lies south of the equator, about 100 miles from the capital, Kampala. Historically, this region is known to have one of the highest HIV prevalence rates in Uganda. Currently, the prevalence rate is 4 points, much higher than the national average of 7.2%.

In Uganda, the education system is based on seven years of primary education completed with standardized national examinations (Primary Leaving Examinations). Thus, primary 2 to 7 is equivalent to grades 2 to 7 in the U.S. system.

Comment: I was not sure why the caregivers "gave consent for their children to participate" (Pg 5 L6) when the caregivers were the participants.

Response: Thank you for your comment. The present study is part of a bigger study that involves children participating in an intervention entitled “Happy Families”. In addition, subsequent study assessments will include children. Therefore, we needed parents/caregivers’ consent for their children to participate in future assessments and the intervention.

Comment: I was also unsure what "basic screening" was done as noted on Pg 5 L7.
Response: Thank you for the comment. In methods section pg 5 L7, we used the word “Baseline screening” not basic screening. Baseline screening was used to identify positive symptomology of behavioral difficulties among participating children.

Comment: In the main, the writing is clear and the paper easy to read though there are a few clerical errors so some proofreading is required.

Response: Thank you for the comment. We have proofread the manuscript to remove all clerical errors.

Comment: Results - When detailing the inferential statistics, it would be helpful to detail the statistical test score, degrees of freedom and probability value. For the t-test scores, reporting confidence intervals would also be useful.

Response: Thank you for this comment. We have included the degrees of freedom for the chi-square statistic.

Comment: Impairment scale results - how was the scoring assessed to determine that there were concerns in relation to a mentioned domain.

Response: Thank you for this comment. The scoring of the impairment scale is detailed in the methods section under measure on pg 4 L46-54.