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Note

**General versus Girl-Targeted Interventions: A False Dichotomy?
A response to Evans and Yuan**

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Summary

This paper provides a review of Evans and Yuan's 2019 paper on 'What We Learn about Girls' Education from Interventions that Don't Focus on Girls.' Their thought-provoking paper raises an important point that even where interventions are not directly aimed at addressing gender issues, evaluations of these programmes should report gender-disaggregated findings (including where results are similar for both girls and boys). They go further than this to suggest '...specifically targeting girls may not be necessary to help those girls succeed. If policymakers want to help girls learn, they can make schools better for all children' (p4). Our review suggests that this conclusion is not warranted based on the information provided in the paper. We raise five points from which we conclude that, if anything, a combination of girl-targeted and general interventions is needed. Importantly, a conclusion to be drawn is that the scope of girl-targeted interventions that have been evaluated to date is narrow, and do not sufficiently address gender-related structural barriers in education, notably ones that affect marginalised girls (for example according to poverty, where they live, whether they have a disability etc) in different ways.

Evans and Yuan (2019a)'s review of girl-targeted and general interventions concludes that *'Our findings demonstrate that gender neutral interventions hold great promise for girls' learning as well as for boys. Considering the limited resources that education systems in most low- and middle-income countries possess, the most practical approach to help girls learn may be to make schools better for all children. Such an approach may also be more politically palatable to voters than programs that restrict their benefits to girls.'* (p14). More stridently, their piece published in Quartz has as its title: *'To keep more girls in school, stop focusing on just girls'* (Evans and Yuan, 2019b).

Based on the evidence that the authors review as well as gaps in the evidence available, we present five points that lead us to conclude that it would be dangerous for governments and development agencies to take forward a message that general interventions are more important for improving girls' education than girl-targeted ones. It is both a premature conclusion to draw and, even from the evidence that is provided in the paper, is inaccurate. What the evidence they present does highlight is an urgent need for more evidence on what type of interventions work to improve education for girls, where, how, and for which girls. Given the evidence available to date, a more appropriate conclusion to draw would seem to be that a combination of general and girl-targeted interventions is needed to improve girls' education. We hope our paper helps to promote new evidence that can provide a deeper understanding of what works to achieve gender equality in education.

1. Need for gender-disaggregated findings in all evaluations

Evans and Yuan raise an important point for the need for evaluations of interventions to disaggregate findings by gender, as many of them do not do so. Based on their attempt to do this, they further conclude that we can learn from general interventions that do not target girls:

- a. We agree that all interventions should provide findings that are gender-disaggregated. As Rachel Glennerster, DFID Chief Economist noted, in a tweet in relation to the paper: *'I have never seen a survey that does not ask gender. The data is there, often people don't report disaggregated impacts unless they find statistically significant differences. We should publish nulls and publish data so that others can check heterogeneous impacts'*
- b. Given it is widely recognised that marginalised girls face particular barriers to their education, we suggest that this also needs to go further to disaggregate gender intersecting with other important markers of difference (notably poverty, location (e.g. rural/urban) and, where feasible with respect to sample sizes, disability, as well as language/ethnicity etc where possible), recognising that this will require attention to sample design and sizes.

2. Limited number of girl-targeted evaluations currently available

Only 23 studies that include girl-targeted interventions are identified for inclusion in the paper, compared with 156 studies on general interventions. While there is no magic number of the number of studies that can give a reliable meta-analysis, there are a number of reasons why the current evidence-base reviewed is insufficient. For example:

- a. Of the 23 girl-targeted studies, 20 are on access with only 11 on learning (compared to 65 on access and 106 on learning amongst the studies on general interventions reviewed). [There are a larger number of interventions than the number of studies since some include papers evaluate more than one intervention, and some are on both access and learning].
- b. More of the interventions reviewed for learning focus on the early grades (1-3). For example, amongst the 'Top 10 Learning Interventions' – including both general and girl-targeted - nine out of ten focus on the primary level, and half are focused on the early grades (G1-3). While this focus is important given that disadvantage starts early, evidence also shows that barriers to girls' education change as they reach adolescence. It is therefore also important to differentiate studies by age/grade.

A conclusion from this is that there is an urgent need for more evidence on what type of interventions work to improve education for girls, where, how, and for which girls. It might be that wider searches would reveal additional studies on girl-targeted interventions than available in the paper by Evans and Yuan. Beyond the literature included from previous systematic reviews, the authors' updated searches appear to be limited to specific journals and websites, rather than using conventional approaches of searching Web of Science, Scopus etc (see Annex 1 in Evans and Yuan, 2019a). It is not possible to identify whether there are potentially specific studies that might be missing, however, as only the top and bottom 10 interventions are included in the paper, the full list of studies are not available for our review.

3. Narrow scope of girl-targeted interventions

Evans and Yuan acknowledge that girls face additional challenges that boys do not face. However, this is not central focus of the evaluations they review on girl-targeted interventions, or their analysis of it. The majority of the girl-targeted interventions reviewed are limited in scope. A large number of both general and girl-targeted interventions are focused on relieving financial constraints through cash transfers (see Table 2). While this limited scope is due to the evidence currently

available and cash transfers clearly have a key role to play, there are a number of issues that arise from a potential imbalance towards specific interventions of this kind:

- The positive effects of cash transfer programmes may be short lived, with positive effects ceasing once the programme is discontinued (e.g. Visaria et al., 2016), perhaps highlighting how cash transfers do little to address structural disadvantages that girls face.
- While cash transfers tackle poverty-related barriers to access, it is recognised that they do little to address the school learning environment (Chaudhury et al., 2013; Duflo et al., 2017; Eyal & Woolard, 2014). As such, more recent programmes have called for a ‘cash plus’ approach that incorporates complementary interventions that address the non-financial, structural barriers that vulnerable populations face (Roelen et al., 2017).
- Some of the studies reviewed are focused on high-performing girls (e.g. Duflo et al., 2017) rather than targeting marginalised girls, which are two very different populations of girls (as recognised by the original authors), so care needs to be paid in differentiating between these studies (see Box 1).
- Regardless of whether girl-targeted or not, cash-transfers appear as both amongst the top and bottom interventions, making overarching conclusions difficult to ascertain (see Point 4).

Box.1 Thought Experiment Revisited

Evans and Yuan present a ‘thought experiment’ through which they propose that ‘interventions not targeted specifically to girls may in fact deliver bigger gains to girls’. For this, they draw on two ‘real-world’ examples, one a girl-targeted merit-scholarship for high-performing girls in Kenya (Kremer et al., 2009) and the second a general intervention in rural schools among underprivileged students in Bangladesh (Islam, 2016). Based on the evidence presented in these different studies they suggest that the most effective intervention for improving girls’ education is in fact the general intervention. However, in arriving at this conclusion the authors overlook two important points. First, the starting points is very different in terms of the target populations: high performing girls in Kenya who are likely to be from better-off backgrounds, compared with a rural, poor population in Bangladesh. It may be unsurprising to show smaller learning gains for high performing girls in Kenya than those likely to be starting from a lower base in Bangladesh. Secondly, although the authors classify the study in Bangladesh as a general intervention there is also a girl-targeted intervention in operation where all girls received a cash grant for attending school.

More generally, wider evidence shows that the challenges that girls face are structurally different to those faced by boys, and particularly so for marginalised girls (Kabeer, 2018). Notably, many of the challenges faced by girls (such as school-based gender-based violence) remain largely hidden and our knowledge of what works to address these issues is limited (Jones et al., 2008; Leach et al., 2014). These challenges are constantly navigated by girls from before they enter school, at the point

of access, as they progress through school and outside of school and thus comprehensive and sustained support for girls is required (see, for example, Kabeer, 2018; Parks et al., 2016; Perezniето, 2016). As such, other studies have concluded that there is a need for a combination of general and targeted interventions to simultaneously tackle the multiple disadvantages that girls face, linking together resources and infrastructure institutional change and gender norms (Gordon et al., 2019; Kabeer, 2018; Parkes et al., 2016; Unterhalter et al., 2014). As our review of the Campaign for Girls' Education (CAMFED) programme shows, such a combination can both have a large impact, and can be cost-effective (Sabates et al., 2018).

4. Evidence available is mixed, with girl-targeted interventions also showing large effects

Our reading of the evidence presented in Evans and Yuan's paper suggests that the message is extremely mixed in terms of whether girl-targeted or general interventions show bigger effects than the authors conclude overall. While Evans and Yuan acknowledge the evidence is mixed, and at points in the paper qualify this by indicating that there are some girl-targeted interventions that outstrip general interventions, this does not get clearly reflected in the overall conclusions.

In this respect, Evans and Yuan note that the larger number of general interventions available mean that there is a larger menu to choose from. They propose that 'Even among the most effective interventions, there are almost as many general interventions with large effect sizes (greater than 0.4 standard deviations) because so many more general interventions have been tested. Therefore, general interventions constitute an important source of ways to improve girls' access to education.' While we would not disagree that general interventions are also important, caution is needed that this is not interpreted to suggest that general interventions are more important than girl-targeted based on the information available. Comparing the respective number of studies included amongst access and learning for girl-targeted versus general interventions, there are a larger proportion of girl-targeted interventions amongst the top 10. For example, of the girl-targeted interventions included on access, around 14% are in the top 10 interventions compared to around 7% for general interventions (Table 1).

Table 1. Intervention Classification (Girl-Targeted vs. General) across Top 10 access and learning and Bottom 10 access and learning as rated by Evans and Yuan (2019a) (according to effect size).

		Rank	Number of Interventions	% of interventions included in each grouping
Girl-Targeted	Access	Top 10	4	13.8%
		Bottom 10	4	13.8%
	Learning	Top 10	2	13.3%
		Bottom 10	0	0%
General	Access	Top 10	6	6.8%
		Bottom 10	6	6.8%
	Learning	Top 10	9	5.1%
		Bottom 10	10	5.6%

Source: Our analysis of Tables 3-6 in Evans and Yuan (2019a)

In addition, some interventions, such as cash transfers, are found to be both most and least effective for improving girls' education access or learning, whether they are girl-targeted or not (Table 2a and Table 2b).

Table 2a: Types of Access interventions in Top 10 and Bottom 10 in Evans and Yuan (2019a)

Access Intervention			Classification	Number of interventions
General	Finance Related	Conditional Cash Transfer	Top 10	3
		Free secondary education	Top 10	1
		Conditional Cash Transfer	Bottom 10	3
		Conditional take-home ratios for girls	Bottom 10	1
		Unconditional Cash Transfer	Bottom 10	1
		Education cash saving w/o parent outreach	Bottom 10	1
Health Related	Malaria prevention	Top 10	1	
	School meals	Bottom 10	2	
Girl-Targeted	Finance Related	Conditional Cash Transfer for girl drop outs	Top 10	1
		Private school subsidies for schools	Top 10	1
		Unconditional cash transfers for girls	Bottom 10	1
		Early Financial Commitment	Bottom 10	1
	Health Related	WASH	Top 10	1
		Hygiene promotion and water treatment	Bottom 10	1
Sanitary Products		Bottom 10	1	
Other	Village based school	Top 10	1	

Table 2b: Types of Learning interventions in Top 10 and Bottom 10 in Evans and Yuan (2019a)

Learning Intervention			Classification	Number of interventions
General	Finance related	PPP subsidy (pooled & uniform)	Top 10	1
		Preschool voucher	Bottom 10	1
		Mother tongue	Top 10	1
	Teacher Training, Instruction and Management	Primary literacy intervention	Top 10	1
		Structured pedagogy	Top 10	1
		TARL 10/20-day camp	Top 10	1
		School management	Bottom 10	1
		Teacher training	Bottom 10	2
		Math tutor software	Top 10	2
	Teaching and Learning Materials	Computer assisted learning in school	Bottom 10	1
		Mobile school librarian	Bottom 10	1
		New curriculum and T&L materials	Bottom 10	1
		One Laptop Per Child	Bottom 10	1
	Incentive Based	School report card	Bottom 10	1
		Attendance reward	Bottom 10	1
Other	Community school programme	Top 10	1	
Girl-Targeted	Finance related	PPP gender subsidy	Top 10	2
	Other	Village-based schools	Top 10	1

NB this is based on our analysis of the tables on the top 10 and bottom 10 interventions.

5. Alternative conclusions drawn by Evans and Yuan

In closer reading of some of the studies included in the analysis of the top and bottom 10 interventions, we find a number of instances where Evans and Yuan appear to draw alternative conclusions to those drawn by the original authors. For example:

- Evans and Yuan present a conditional cash transfer in the Philippines as one of the bottom 10 interventions in terms of girls' access among 15-17 year olds (Chaudhury et al., 2013). However, in the original study it is indicated that "...the programme was not explicitly designed to improved school of children above age 14" (p10). The programme did in fact help to keep poor children in school by increasing enrolment among young children (3-11 years old) and increasing attendance among 6-17 year olds.
- Another of the least effective interventions identified by Evans and Yuan for improving girls' education access was the provision of sanitary products in Nepal (Oster & Thornton, 2011). On further investigation of this study we find that this was an evaluation of the uptake of a menstrual cup, a 'completely new and unfamiliar technology' in Nepal, where even the use

of tampons is *'extremely rare'* (Oster & Thornton, 2009 (previous study)). As in many other Southern contexts, insertable products such as tampons and menstrual cups may be socially unacceptable linked to strict interpretations of virginity. Given that this study was conducted amongst young girls who were on average 14 years old, and *'just coming familiar with their reproductive health'*, they may also have experienced difficulties in using the menstrual cup (Oster & Thornton, 2009). In addition, girls may have experienced shame in talking about their menstruation, with the original authors indicating that the actual cup usage may have been somewhat different to reported cup usage, but that this is not possible to determine. While in their Quartz article, Evans and Yuan recognise that other evidence demonstrates the importance of providing sanitary material for girls, citing Benschaul-Tolonen et al. (2019), they draw the opposite conclusion in their paper.

- Another of the 'least effective' interventions identified for improving girls' education access are school canteen (general intervention) and conditional take-home rations for girls (girl-targeted intervention). These are both from a study looking at the effect of the construction of girl-friendly schools in 132 rural villages in Burkina Faso (Kazianga et al., 2013). The original authors found that the package of reforms designed to create girl-friendly amenities were successful in improving girls' enrolment. Even ten years after the programme the original authors found that intervention had raised girls' academic outcomes, and reduced early marriage and child bearing (Kazianga, 2019).
- Another study assesses the impact of school water, sanitation and hygiene (WASH) improvement on pupil enrolment and gender parity in enrolment in Kenya (Garn et al., 2013). Importantly, the different interventions included in the study take place in different types of schools (water available versus water scarce) with schools with poor water access demonstrating an increase in enrolment, particularly for girls, but these effects are not found among schools with better water access. The study concludes by suggesting that school enrolment and gender parity may be improved by a comprehensive WASH programme. In reviewing this evidence, Evans and Yuan report that the intervention that includes Hygiene promotion + water treatment + sanitation + water supply' (water scarce) is amongst the top 10, but the Hygiene promotion + water treatment (water available) is amongst the bottom 10. Thus the conclusion that they draw is perhaps misleading as it does not account for the different contexts in which these interventions are undertaken. Furthermore, Evans and Yuan suggest that *'promoting hygiene and improving water storage alone actually reduced enrolment for girls' (p11)*, which seems to miss an important point

that the original authors note that reported decreases in enrolment are most likely due to political upheaval in the country at the time.

6. Measuring progress in girls' education needs to go beyond access and learning

The findings reported by Evans and Yuan as well as their categorisation of 'what works' shows the importance of reassessing how we measure progress in girls' education. As with other systematic reviews, they focus on indicators such as enrolment, attendance and learning but positive effects outside of these indicators are not included, such as progress in reducing rates of early marriage, fertility etc. which also impact girls' education. Some girl-targeted interventions have shown positive outcomes in this regard.

- For example, in Malawi an unconditional cash transfer to adolescent girls is presented as one of the least effective in improving girls' access (Baird et al., 2011). However, this study found that unconditional cash transfers were more effective than conditional cash transfers in reducing teen pregnancy and marriage rates, which have significant effects on girls' education and learning.
- Similarly, the WASH study in Kenya (Garn et al., 2013) also found that in addition to the potential of a comprehensive WASH programme to increase girls' school enrolment and gender parity it may help to reduce the burden of water collection on children at school and at home, which predominantly fall upon girls, and is also important for girls when they reach the age of menstruation.

In extending this evidence-base to identifying what type of reforms work best to shift social norms, it will be important to recognise that such interventions can take time to have an effect, while most evaluations are undertaken within a short period of the intervention taking place.

Summary: Some Alternative Messages

Based on our review of the Evans and Yuan review, we propose some alternative messages:

- There is an urgent need for more evidence on what type of interventions work to improve education for girls, where, how, and for which girls. This evidence needs to include evaluations of interventions that tackle the structural barriers to girls' education.
- Given the evidence available it would seem a more appropriate conclusion to draw would be that a combination of general and girl-targeted interventions are needed to improve girls' education.

- This evidence needs to take account of the different challenges faced by girls according to factors such as age, location, socio-economic status, disability etc – given the variety of barriers that these different groups face.

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