Making schools more girl friendly: Exploring the effects of ‘Girl Friendly Space’ on school attendance of adolescent girls

**Background**
Gender parity in education is a key priority in Save the Children International (SCI) in Somalia for holistic individual child development. Low retention and irregular school attendance characterize the education sector in the country. Irregular school attendance is a precursor to school dropout, and the underlying factors for both absenteeism and dropout are possibly the same. These disproportionately affect girls due to gender bias in parents’ willingness to pay for education expenses, fear of gender-based violence at schools and the need for homely chores. Girls may face additional constraint associated with school sanitary conditions at their puberty. The lack of privacy and space for changing, drying sanitary materials, as well as insufficient water are often reported as important determinants of girls’ school attendance. Somali girls are socialized to shy away from using publicly located toilets for fear of being seen by boys. Most schools are located in small parcels of land making it impossible to ‘hide’ toilets. **Girl Friendly Space (GFS)** provide multipurpose exclusive space for girls with toilet, bathrooms, dining rooms, living room, reading materials and prayer facilities. This research explores the potential impact of GFS in reducing female student absenteeism.

**Data and methodology**
The data comes from a strategic review of child protection in education. In that study, surveys were conducted in 24 schools equally distributed across 4 districts - Abudwak, Banadir, Garowe and Gardo. School level data were collected through observation of school environment and compilation of secondary data from school records. Additionally, one-on-one interviews were conducted with 933 students. Students participating in this survey were sampled randomly, and stratifying by grade (grade 4 to 8) and sex. The student survey included information on socio-economic characteristics, child protection issues experience at school, brief mathematics competency test, school attendance validated from class attendance register and reasons for school absenteeism. Data from these surveys were analysed to measure the potential impact of GFS in reducing female student absenteeism. We also use absenteeism due to “sickness” a proxy to menstruation-related absenteeism.

**Findings**
While the students from schools with GFS have 11 percentage points lower absenteeism for both boys (37% vs. 26%) and non-adolescent girls (38% vs. 27%), the difference is much sharper at 19 percentage points for adolescent girls (33% vs. 14%). Most students cited ‘sickness’ as a reason behind absenteeism. It is possible that ‘sickness’ reported by adolescent girls was a euphemism for menstrual cramps and menstruation in general. Non-adolescent (29% vs. 7%) and adolescent (23% vs. 8%) girls in school with GFS were far less likely to report sickness related absence as compared to their male peers (28% vs. 23%).

**Figure 1: Students absent from school at least once in the last one month**

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Since student absenteeism from school is associated with student grade, orphanhood, satisfaction with latrine cleanliness, feeling safe in school, time taken to walk to school, and whether school is in an IDP camp, we measure the difference in absenteeism after controlling for these factors in regression analysis. In interpreting this result, it is important to note that this was cross-sectional data and therefore not entirely possible to eliminate possibility of biased estimate due to omitted variables. As shown in Figure 2, presence of GFS in a school was associated with 14.8 percentage points reduction in school absenteeism among adolescent girls after controlling for student characteristics and district variations. When reasons behind school absenteeism are considered, we find significant negative correlation between GFS presence in school and sickness-related absenteeism among adolescent girls only. Results further shows presence of GFS in a school was associated with 16.6 percentage points reduction in sickness-related absenteeism among adolescent girls. The point estimates for the non-adolescent girls are also of similar magnitude although not statistically significant. The not significant effects for boys build confidence in interpreting the difference observed for adolescent girls as “impact”. School level data also showed major reduction in school dropout rates for girls from 22% (in 2015) to 12% (in 2016) after GFS was introduced. In contrast, the dropout rates in schools without GFS were stable at around 8%.

While regular school attendance is expected to influence students’ academic performance through increased teaching, academic achievement can also influence school attendance through increased motivation. Therefore, it is natural to find positive correlation between attendance and academic performance. Given that earlier results showed reduced absenteeism among schools with GFS, we compared competency test of the students from schools with/without GFS. We find presence of GFS was associated with lower maths scores, but this was only consistent adolescent girls (See Figure 3). Plausible explanation of this negative association is the massive reduction in school dropout rates for girls in schools with GFS. Because of the reduction in these absenteeism and dropout, more poorly performing girls are retained in school. Therefore, these students would pull the average down for the girls sample in schools with GFS. Possible limitation to this result emanates from test administered; although we administered similar test to all the grades, we did not find consistent increase in maths scores with higher grades.

The evidence indicates possible effectiveness of providing improved sanitation facilities with sufficient privacy and satisfactory cleanliness through GFS on reducing absenteeism among girls. Therefore, GFS can play significant role in reducing gender gaps in access to education. On the knowledge front, proper impact evaluation is required to estimate the full effects of this as an intervention and demonstrate its cost-effectiveness.