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Girls' Education South Sudan (GESS)

Cash Transfers Impact Study

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CAMBRIDGE EDUCATION

BBC MEDIA ACTION
TRANSFORMING LIVES THROUGH MEDIA AROUND THE WORLD

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Abbreviations

BoG	Board of Governors
CG	Capitation grants
COVID-19	Coronavirus 19
CT	Cash transfers
DFID	Department for International Development
EMIS	Education management information system
ERIC	Ethical Research Involving Children
ESA	Education sector analysis
EU	European Union
FCDO	Foreign, Commonwealth, and Development Office
FIES	Food Insecurity Experience Scale
GAC	Global Affairs Canada
GBP	Great British Pound
GESS	Girls' Education South Sudan
GPE	Global Partnership for Education
GRSS	Government of the Republic of South Sudan
IACWG SS	Inter-Agency Cash Working Group South Sudan
KER	Knowledge, evidence, and research
KERL	Knowledge, evidence, research, and learning
M&E	Monitoring and evaluation
MoGEI	Ministry of General Education and Instruction
NCT	No cash transfer
P1-P8	Primary 1 to Primary 8
S1-S4	Secondary 1 to Secondary 4
SA	State Anchor
SAMS	Schools' Attendance Monitoring System
SBRT	School Budget Reporting Tool
SDP	School Development Plan
SFR	School Finance Report
SMC	School Management Committee
SPSS	Statistical Package for the Social Sciences
SSP	South Sudanese Pound
USAID	United States Agency for International Development
USD	United States Dollar
VfM	Value for money
WASH	Water, sanitation, and hygiene
Y1…Y5	2019-20…2023-24

1. Executive Summary

Girls Education South Sudan (GESS) is a programme that aims to transform the lives of a generation of children in South Sudan, especially girls and those in the margins of society, through education. It has five activity and output areas, including behaviour change communication, cash transfers, capitation grants, quality education, and knowledge, evidence, research, and learning. The programme has been running since 2013, with the second phase of the programme running since 2019.

The present study was conducted to understand the impact of the cash transfers component of the second phase of GESS on outcomes on girls enrolled in Primary 5 to Secondary 4 (P5-S4), including patterns of spending and effects on enrolment, attendance, retention, attainment, and attitudes towards education. Previous literature has shown that cash transfers are an effective intervention method to improve school enrolment and attendance, particularly in countries where the baseline enrolment and attendance are low (Bastagli et al., 2016) Using data from the South Sudan Schools' Attendance Monitoring System (SAMS), set up by the programme, and controlling for prior enrolment, conflict, location, ownership, and level, Crawfurd (2016) found that 'schools that receive cash transfers [grow] by at least 6% more than schools that do not' (p.15) and 'schools that receive[d] cash transfers increased their female enrolment share by 2%' (p.16).

The study combined analysis of available secondary data with primary data collection from a representative simple random sample of students in schools from across the programme (*N* = 339), alongside qualitative and quantitative surveys from a quota of households designed to include households benefitting from multiple cash transfers, households of children with disabilities, and households not benefitting from any cash transfers (*N* = 77).

The report presents its findings in the following sections:

- **Section 2** introduces GESS, the research questions, and supporting evidence.
- **Section 3** provides an overview of the methodology, including study design, sampling strategy, survey protocols, and limitations.
- **Section 4** provides general findings on disability, vulnerability, and cash transfer spending, as well as answering evaluation questions on enrolment, attendance, retention, attainment, wider impacts, differences from the first phase of GESS, and effectiveness.
- **Section 5** summarises the findings of the report and provides recommendations for future programming and evaluations.

1.1. Key findings

- The second phase of GESS has continued to support girls in South Sudan, with cash transfers (CTs) provided to 887,694 unique individuals as of March 2022. On average, 88% of enrolled girls in targeted schools were eligible to receive one or more cash transfers, and two-thirds of girls received multiple cash transfers over the implementation period.

- 74% of girls reported keeping the entire amount of the cash transfer for themselves, whereas the remaining 26% mostly reported having to give a portion to their parent, sibling, or other family member. 94% of girls reported having control over deciding what to purchase with the cash transfer, with only 6% saying their family decided for them.

- Our research did not prove a link between cash transfers and increased girls' enrolment as was found in the first phase of GESS, but there is evidence to suggest this link. This may be in part because the second phase of GESS has saturated the target population, and in part because the conditions for conducting a 'natural experiment' between similar groups of girls, some of whom received cash transfers and others who did not, did not exist for the second phase of GESS implementation period. However, the priority here is for further research as this study did not disprove a link.

- There is evidence that the amount of cash transfers was not sufficient to meet students' needs. Girls reported spending two-thirds of the amount of CTs on personal items (shoes, soap, school bags, uniforms, and sanitary pads), with nearly a quarter (23.8%) of their CT on shoes. Read

against other responses – 95% of respondents walked to school, and that girls who received cash transfers were nearly twice as likely to say they had been absent for two or more days because of 'not enough money to buy shoes, clothes, or uniforms' compared to girls who reported receiving zero or one cash transfer – we can infer that at the time of the study the amount of the cash transfer may not have been enough to meet demonstrated need.

- The depreciation of the South Sudanese Pound and fluctuation in exchange rate with GBP meant that the second phase of GESS cash transfers were worth GBP 10 - GBP 15 in 2021 and GBP 15-GBP 20 in 2022, and at the maximum met only about half the cost of school supplies, as estimated by the 2021 South Sudan Education Sector Analysis report.

- Across the sample, 71% of students targeted were present and able to be found in schools. This compares well to the GESS endline survey (2018), which found 47% of girls who received CTs in 2017 were present for the fieldwork.

- As indicated above, we found primary evidence that cash transfers were linked to increased girls' attendance and retention. Girls who received two or more cash transfers ('CT girls') were significantly less likely to be absent due to illness compared to girls who did not ('NCT girls'). 63% of CT girls who reported having missed school more than two days at a time said it was due to illness, disability or injury, compared to 84% of NCT girls. This suggests that CT girls may be motivated to come to school despite an actual illness, or less likely to use illness as an excuse not to come to school.

- This said, girls who received cash transfers were still significantly more likely to say they had been absent for two or more days because of 'not enough money to buy shoes, clothes, or uniforms' than NCT girls. As detailed in the finding above, this suggests that girls receiving cash transfers may be more sensitive to costs around education and the amount of cash transfers, especially in later programme years, may not have been sufficient to cover girls' needs or fully address causes of absence.

- There was no significant difference in attendance on the day for girls who reported receiving their cash transfer a few weeks or a few days before the survey, compared to those who reported receiving their cash transfer more than a few months or a year earlier. This suggests that most girls do not attend class significantly less or drop out for the year once they have received their cash transfer for the year.

- We found no evidence of cash transfers linked to increased educational attainment. This is potentially due in part to the relatively weaker role played by cash compared to other factors (e.g. supply and quality of schooling) for such indicators.

- Girls who received cash transfers had more positive attitudes towards the equality of education and to continuing education versus getting married, compared to girls who did not receive them. 85% of CT girls responded that girls and boys should 'always' be educated equally, compared to 77% of NCT girls, and 95% of CT girls reported that they would like to proceed to the next level of education after finishing at their current school, compared to 91% of NCT girls. The percentage of CT girls reporting that they planned to be married by the end of the level they were studying dropped from 12.5% in P5 to 5.5% in P8 and 0% in S2.

- A majority of parents (52%) in the 2022 household survey stated they would prioritise all children regardless of gender, and in fact gender was not mentioned at all as a reason for prioritising certain children. This is notably different to initial responses given in the GESS endline household survey (GESS 2018b), which with a similar methodology found respondents gave a preference towards boys when asked which children should be prioritised.

- Qualitative analysis of responses given by parents at the end of the first phase of GESS (2018) and the second phase of GESS (2022) show that parents now recognise the negative social consequences they face for not sending their children to school, and the negative consequences for the child's future.

- Parents report that educational costs have increased. While in terms of South Sudanese Pounds (SSP) the costs of various costs have nominally increased, in terms of GBP real costs have decreased. The only real increases reported in terms of GBP from 2018 to 2022 were tuition and examination fees in both primary and secondary schools. We note that although data on household spending were not gathered, recent shocks may mean that average household income has decreased over this period as well.

- When conducting quantitative analysis, we did not find that students who reported having a mild disability was a useful analytical category, as there was no pattern of their responses being statistically significantly different than other students. The number of students reporting a moderate or severe disability was 1.8% of the total representative sample. This suggests that students with moderate or severe disabilities may be significantly underrepresented in schools, with perhaps 85%[1] out of school.

1.2. Key recommendations

- The programme should increase the amount given for future cash transfers, in line with the Education Sector Analysis, and informed by further primary research-with households to better understand spending pressures and dynamics and insure these are adequate to meet demonstrated need. If resources are still constrained, the Programme could consider supporting fewer girls with high value/adequate cash transfers, to inform further research as to whether higher value promotes enrolment effectively.

- For future support we recommend denominating cash transfers in terms of USD or GBP. In practice this would mean being more flexible as the variability of exchange rates between SSP and GBP has meant that the value of the cash transfers and their purchasing power parity were not consistent from year to year, fluctuating by a factor of two to three times over programme implementation periods.

- Findings and gaps in this report should be strengthened and addressed through the programme endline evaluation, both through household-based sampling and a more comprehensive approach that includes all programme output areas, particularly community awareness, to see if this is linked to the increase in girls' enrolment seen over the second phase of GESS implementation.

- A programme endline, or further studies, should consider using a household-based sampling approach to understand how the programme can address the needs of out-of-school children, including children with disabilities. South Sudan has one of the worst primary and secondary enrolment rates in the world, with an estimated 60% of children in South Sudan still out of school (ESA 2018a). The endline evaluation could use an approach that includes household-based research so that the needs of out-of-schoolchildren, including children with disabilities, can better be met by future programming.

[1] Globally about 15% of people live with some form of disability (WHO, 2011)

2. Introduction

The second phase of Girls' Education South Sudan programme is being implemented between 2019 and 2024. The second phase of GESS, which is funded by the United Kingdom Foreign, Commonwealth, and Development Office (FCDO), Global Affairs Canada (GAC), United States Agency for International Development (USAID), European Union (EU) and part of the FCDO South Sudan's Essential Services Team portfolio, builds on the success of the first phase of GESS, which ran from 2013 to 2018. the second phase of GESS operates against a context of continuing conflict in the world's newest state. Although a peace agreement was brokered in 2019 between the ruling Government of the Republic of South Sudan (GRSS) and opposition parties, conflict continues to be driven by exclusionary politics and disputed political and administrative boundaries, increasingly drawn along ethnic lines, widespread poverty and food insecurity, conflict over cattle and natural resources, exacerbated by environmental factors including drought and floods, sexual and gender-based violence (DFID, 2018). The second phase of GESS Business Case recognised that girls are particularly vulnerable in the context in which the programme was designed, with many families preferring to prioritise sending their boy children to school and pressuring girls into early marriage by age 12-13. EMIS 2015-16 data, SAMS 2014-18 data and SAMS 2014-2019 data showed a gap in enrolment and attainment between boys and girls from primary level that widened into secondary (Mott MacDonald, 2019a).

The second phase of GESS aims to transform the life chances of a generation of South Sudanese children – particularly but not exclusively girls – through education, while stabilising priority areas of the education sector and concurrently seeking to deliver improved quality education. At outcome level, the programme seeks to improve girls' educational attainment from that already achieved during the first phase of GESS, building further gains on school enrolment, reducing barriers to education, and promoting equity in access for all children. Therefore, the second phase of GESS programme outputs include 1) community mobilisation and behavioural change, 2) cash transfers (CT) to girls, 3) capitation grants to schools, 4) quality of education, and 5) building a knowledge base for support to girls' education. All outputs integrate cross-cutting themes of disability, gender, safeguarding, conflict sensitivity, sustainability, and value for money (VfM) in their delivery.

The programme has not included several features that were proposed in the cash transfers strategy or the second phase of GESS inception report. One of the key lessons reported in the second phase of GESS cash transfer strategy document was to 'consider delivering varied amounts [of cash transfers] amongst girls as they are not a homogenous group...Girls in upper primary and secondary bear more education related costs...marginalisation index need consideration [sic] and differential amounts allocated on that basis (Gitonga et al., 2019:17). The GESS technical proposal, under the section *Providing equitable transfers to the vulnerable*, Mott Macdonald (2019a:33) wrote that 'we will evaluate the feasibility of paying differentiated amounts of CT to girls enrolled in higher grades as well as to vulnerable learners, for example those living with disabilities'.

Although cash transfers were varied according to primary and secondary students, at the time of the research no marginalisation index or groups of vulnerable girls were identified to receive increased cash transfer amounts. Moreover, due to lack of network coverage, novel modalities for implementation, including mobile money and biometric verification, were not implemented.

This means the programme has a single modality of delivering cash transfers, where State Anchors (SAs) verify the identity and eligibility of recipients and then facilitate cash transfers to girls. Girls are eligible for the cash transfers from Primary 5 (P5) to Secondary 4 (S4), with a minimum of five attendance reports, cross-referenced with daily attendance register entries and examination reports. During the implementation period, around 80% of girls met attendance eligibility requirements (excluding 2020, when these were suspended due to COVID-19), and 95% of eligible girls collected their cash transfer.

2.1. Study background

Cash-based programming offers social protection and helps to build resilience within communities. Internationally, cash transfers have contributed to breaking the cycle of poverty and reducing inequality both by redistributing resources and through the accumulation of human capital among poor households (Bastagli et al., 2016). Cash transfers have been shown to protect beneficiaries from shocks, reducing

the use of negative coping strategies that undermine longer-term livelihood sustainability, and allowing households to shoulder more economic risks, and so engaging in more potentially profitable activities (Behrman & Calderon, 2009).

Over the life of the first phase of GESS, 520,000 cash transfers were disbursed, with the support of the State Anchors to over 295,415 unique girls in grades P5-S4, surpassing the programme target set at 200,000. Overall, 135,874 girls received one transfer, 62,676 received two transfers, 53,671 received three transfers and only 24,796 received the maximum of four cash transfers during the life of the programme. A total of GBP 11,370,969 was disbursed over the same period with an average cash transfer of GBP 21.80.

The midline Knowledge, Evidence and Research (KER) report from the first phase of GESS provided evidence of the impact of cash transfers including improved attendance, lowered attrition rates, increased choice by girls on how to spend cash transfers, and improved ability to access education enabling items such as shoes, pencils, exercise books. The most common reported uses of the cash transfers by girls were for buying shoes, exercise books, pens/pencils, and soap.

The second phase of GESS is continuing to provide cash transfers to increase girls' access to education, promote social inclusion and reduce poverty. In that regard, and in accordance with pledge 4 of the 2030 Agenda for Sustainable Development of leaving no one behind, the second phase of GESS aims to deliver cash transfers to all eligible girls in grades P5-S4 in South Sudan, with a target of reaching about 1.1 million new unique girls between P5 and S4 by 2024 (2022). The programme has focused on addressing high rates of dropout particularly from P6[2] and during the transition from primary to secondary (P8 to S1) by allocating different CT amounts depending on the varying needs of the girls.

Different approaches to targeting girls and fluctuations in the exchange rate meant that CT amounts varied over the course of the programme. The tables below show the lower and higher amounts for non-priority girls and priority girls. In 2020, due to the pandemic and because schools were closed, all girls were given the same amount, and conditionality on attendance was suspended. In the later years, the programme settled on giving a lower amount to girls not in their exam years and a higher amount at critical transition points in P8 and S4.

Table 1: Lower cash transfer amount in SSP and GBP, during the second phase of GESS programme years

	Date CT issued	July 2018	Nov 2019	May 2020	Nov 2020	Nov 2021	Nov 2022
	Grades targeted	**P5, P7, S3**	**P5**	**P4-P8**	**P5-P7, S1-S3**	**P5-P7, S1-S3**	**P5-P7, S1-S3**
Currency	SSP	2,050	2,200	3,300	5,500	5,600	11,000
	GBP	31.10	10.78	16.78	23.92	10.00	14.96

Source: SAMS database (2023), fxtop.com (2023)

Table 2: Higher transfer amount in SSP and GBP, during the second phase of GESS programme years

	Date CT issued	July 2018	Nov 2019	May 2020	Nov 2020	Nov 2021	Nov 2022
	Grades targeted	**P6, P8, S1, S2, S4**	**S4**	**S1-S4**	**P8, S4**	**P8, S4**	**P8, S4**
Currency	SSP	4,100	2,750	3,300	8,250	8,400	14,400
	GBP	26.20	13.48	16.78	35.88	14.99	19.58

Source: SAMS database (2023), fxtop.com (2023)

In 2021, girls in non-transitional years P5-P7 and S1-S3 received SSP 5,600 each (GBP 10) while girls in P8 and S4 received SSP 8,400 each (GBP 15). In 2022, girls in P5-P7 and S1-S3 received SSP 11,000 each (GBP 15) while girls in P8 and S4 received SSP 14,400 each (GBP 20). The total value of

2 Programme staff attribute girls' dropout following P5 to the onset of menstruation and early marriage at age 12-13, and because there is an exam at the end of P5 and many families feel five years of schooling is adequate for a girl.

cash transfers to girls under the GESS project has surpassed the total spending by the government on operational transfers for both states and counties (one billion SSP) (ESA 2021b:Slide 31).

2.2. Study objectives

Like previous studies conducted by the GESS programme, this research will inform policy and decision-making by FCDO South Sudan, Global Affairs Canada, USAID, and the EU, as well as the Government of the Republic of South Sudan (GRSS) regarding the use of cash transfers to promote education in emergencies. Findings from the cash transfers study will inform the ongoing study on capitation grants, as well as the end-of-programme evaluation scheduled for Year 5.

The research was led by the knowledge, evidence, research, and learning (KERL) team, led by short term technical expertise and the KERL lead, and supported by the wider programme team including the in-country monitoring and evaluation team and implementing partners on the ground, the State Anchors (SAs), and enumerator teams.

The objective of the study is to explore the link between cash transfers and enrolment, attendance, retention, and educational attainment. The effects of cash transfers will be controlled for, where possible, by using data from other programme outputs.

South Sudan has experienced several major unanticipated shocks during the first and second phases of the programme, including widespread conflict in 2013 and 2016, school closures due to COVID-19 for most of the 2020 school year, and inflationary pressures leading to the devaluation of the South Sudanese Pound even before the current global cost of living crisis. In 2020, cash transfers were distributed to all eligible girls with no conditionality on attendance, as schools were closed, and the programme team deemed that this was needed to ensure the social protection of girls.

As such, the study tested some of the assumptions around the design of the second phase of GESS to see if these still hold in the changes of context over recent years. Specifically, we tested whether, in the climate of increasing food vulnerability and external economic shocks, the budgeted amount – which is currently GBP 15 - GBP 20 but will be increased in future rounds – is adequate. The study also examined household attitudes towards girls' and boys' education, the role girls have in decision making in relation to the use of the money and specifically if the money is used for buying items to directly support school attendance such as shoes, school uniforms, school materials, and menstrual hygiene management supplies, and whether the timing of cash transfers affects girls' decision-making and continued school attendance (See Gitonga et al., 2019:17).

2.3. Research questions

Central research question: To what extent have cash transfers contributed to the expected programme outcomes of:

a) An acceleration in girls' enrolment, attendance, retention (from that already achieved in GESS Phase 1), and
b) Educational attainment: in building further gains on school enrolment, and reducing barriers to education and promoting equity in access for all children?

To explore the central research question and issues pertaining to relevance, efficiency, and sustainability, the study will seek to answer the following sub-questions:

EQ1. Has the distribution of cash transfers affected girls' **enrolment** between P5 and S4? If so, how has this differed by school level and by girls with disabilities? If not, why not?
EQ2. Has the distribution of cash transfers affected girls' **attendance** between P5 and S4? If so, how has this differed by school level and for girls with disabilities? If not, why not?
EQ3. Has the distribution of cash transfers affected girls' retention between P5 and S4, including drop out, and how have CTs supported transition from primary to secondary education specifically? If so, how has this differed by school level and for girls with disabilities? If not, why not?
EQ4. Has the distribution of cash transfers accelerated girls' educational attainment, and if so, how?

EQ5. What wider impact/benefit do CTs have on families aside from the enrolment, attendance, retention, and educational attainment of girls?
EQ6. How was the Cash Transfer Output of the GESS Programme affected by the COVID-19 outbreak related school closures?
EQ7. Has the delivery of Cash Transfers been effective from the point of view of timeliness and transparency? What lessons can be learned from the delivery of cash transfers to inform future programming?

2.4. Supporting evidence

The approach to the cash transfers study builds on data gathered through the first and second phases of the programme, and other related materials.

2.4.1. GESS cash transfers design document

Cash transfers have the potential to increase and protect children's education by covering school expenses, compensating for lost income when children are sent to school rather than work, ensuring that children are better nourished at school, and providing an incentive for attendance when cash is conditional (Adato & Bassett, 2009). The South Sudan General Education Act of 2012 and the South Sudan Constitution state that primary education shall be free and accessible to all citizens in South Sudan without discrimination on the basis of sex, race, ethnicity, health status including HIV/AIDS, gender, or disability. There is substantial evidence that, by increasing incentives for parents and helping to offset the costs of schooling, cash transfer programmes can significantly increase participation in school in the short term (Barnham, Macours, & Maluccio, 2019).

International evidence shows that cash transfers are an effective intervention method to improve school enrolment and attendance, particularly in countries where the baseline enrolment and attendance are low (Bastagli et al., 2016). In a review of the evidence around cash transfers, Bastagli et al. (2016) found that the amount of the transfer needs to be just the right amount in order to cover the beneficiary's basic needs, and for education, there was no evidence that increasing the amount of the cash transfer from a level found to be sufficient affects attendance and no clear evidence linking higher amounts to increased educational outcomes. This is potentially due in part to the relatively weaker role played by cash compared to other factors (e.g. supply and quality of schooling) for such indicators. Bastagli et al. also found cash transfers were linked to multiplier effects in markets for local goods and services, thereby contributing to income growth for others who have not directly received cash transfers. In GESS, most of the agents that are used for delivering money to students are local traders who can pre-finance SSP and are able to obtain foreign currency to import more goods from Kenya and Uganda.

Survey results from the first phase of GESS showed that the cash transfers given to girls were spent on multiple items: 79% of the girls spent on shoes, 67% spent on school materials, books etc. and 65% spent on uniforms. By November 2017 more than 200,000 girls had benefitted from this five-year programme. Crawfurd (2016) found that that enrolment increased in schools in the year following payment of either capitation grants (paid to schools) or cash transfers (paid to pupils).

For that reason, cash transfer levels should at least reflect the cost of basic school supplies: in P1-P3 the average cost was estimated at GBP 11;[3] in P4-8 at GBP 14 and in S1-4 at GBP 25 (compared to cash transfers currently worth around GBP 15 for primary and GBP 20 for secondary). School uniforms are included because they are usually mandatory. This shows that the values of CTs were set appropriately and could reasonably be increased to offset other costs of education, especially at secondary level.

The EU has used and built on the systems established by the first phase of GESS, including SAMS, to fund teacher incentives for approximately 30,000 teachers in South Sudan under the IMPACT programme, which closed in 2020. Through this support, primary school teachers in South Sudan received monthly cash incentives worth USD 40 (around GBP 31) over an 18 month period, providing vital support to the education sector. The monthly payment topped up government salaries as an effort to mitigate against loss of value due to inflation and effects of conflict. This support provided critical

[3] Values calculated by converting SSP amount, where available, at the exchange rate on 31 March of the year. See the section on Limitations, p.15, below.

funding to the education system. The result has been improved teacher attendance and improved standards of learning in schools, which had almost collapsed. The South Sudan Education Cluster worked closely with the IMPACT programme to harmonise the value of teacher incentives to mitigate the risk of emergency programming support becoming more financially appealing than staying to teach in emergency-affected communities.

Since 2015, CTs in South Sudan have been coordinated through Inter-Agency Cash Working Group South Sudan (IACWG SS). Currently 192 organisations are conducting cash as voucher transfers in South Sudan, and the IACWG SS mandate is to coordinate, communicate and share information with these organisations. Participants are given an opportunity to showcase their work, experiences and lessons learnt in their implementation. The group is a multisectoral working group that meets twice a month to ensure robust and active coordination.

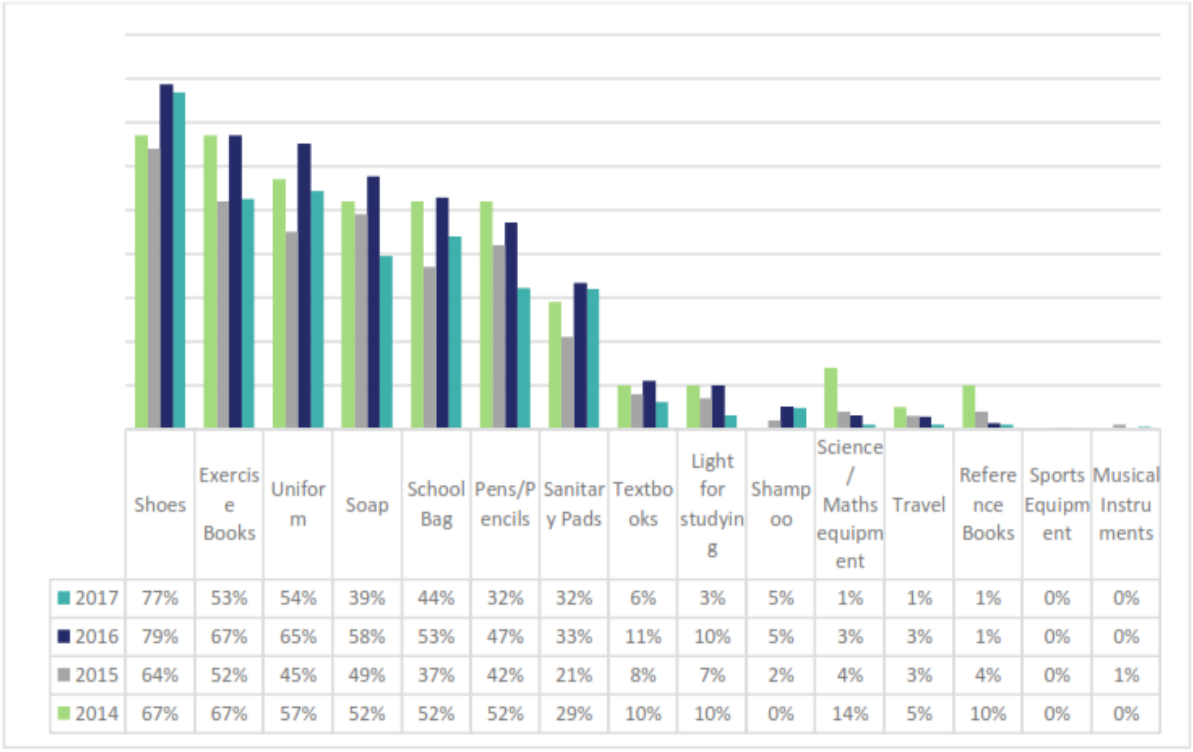
2.4.2. Findings from the first phase of GESS

The Knowledge, Evidence, and Reporting (KER) function from the first phase of GESS produced several programme evaluations. The school survey covered cash transfers along with school capitation grants and other topics, and was conducted at baseline (2014), midline (2017), and endline (2018). These evaluations were used as the basis for many of the instruments in this survey, to provide consistency and facilitate comparisons between the two phases of the programme.

The GESS endline evaluation (2018)showed that cash transfers had wide reach and coverage by the end of the first phase of GESS. The Endline School Survey Report (2018) found that by the end of the programme, 90% of schools reported receiving cash transfers. Of those that did not, half of the head teachers said it was because the school was ineligible for CTs (GESS, 2018b).

The household survey found that cash transfers were used to purchase a range of relevant items to support girls' education; Figure 1 below. 94% of girls receiving CTs said they made decisions on how to spend the money themselves, and the majority of parents said that the money had benefitted the whole household (GESS, 2018b:90). The evaluators posited that 'this was likely' because CT money reduces the overall burden on the household finances, as the money is used for school fees and other educational items which may otherwise have been paid for by the parents' (GESS, 2018b:90).

Figure 1: Items purchased using GESS cash transfer money, 2014-17



	Shoes	Exercise Books	Uniform	Soap	School Bag	Pens/Pencils	Sanitary Pads	Textbooks	Light for studying	Shampoo	Science / Maths equipment	Travel	Reference Books	Sports Equipment	Musical Instruments
2017	77%	53%	54%	39%	44%	32%	32%	6%	3%	5%	1%	1%	1%	0%	0%
2016	79%	67%	65%	58%	53%	47%	33%	11%	10%	5%	3%	3%	1%	0%	0%
2015	64%	52%	45%	49%	37%	42%	21%	8%	7%	2%	4%	3%	4%	0%	1%
2014	67%	67%	57%	52%	52%	52%	29%	10%	10%	0%	14%	5%	10%	0%	0%

Source: GESS (2018b:89).

The evaluators found that 'CTs are tangibly improving girls' access to education, but the declining effective value of the CT in context of the economic crisis could weaken positive enrolment trends. If CTs are not adjusted to account for exchange rate depreciation, inflation and the worsening economic situation, learners may not be able to purchase essential commodities/prerequisites (uniforms, shoes, exercise books, soap, and sanitary products) that preclude even basic learning. Concern may also be raised that with household budgets squeezed during the ongoing economic collapse, the next cycle may see girls' autonomy on spending decisions diluted as the basic needs of households become harder to meet' (GESS, 2018b:94-95).

Other key lessons learned from the first phase of GESS were around timing: 'Cash Transfers are most needed at the start of the school year, when the costs related to education are the greatest. However, we also want to stay cautious that payment of CT at the start of the school year may weaken the CTs' power to keep girls' attendance high throughout the year (girls may drop out after receiving the CT)' (Getonga et. al., 2019:17).

Following up on these findings and lessons, the CT research study was designed to test the sufficiency of the CT amount and whether the timing of receipt of CTs affected girls' spending patterns.

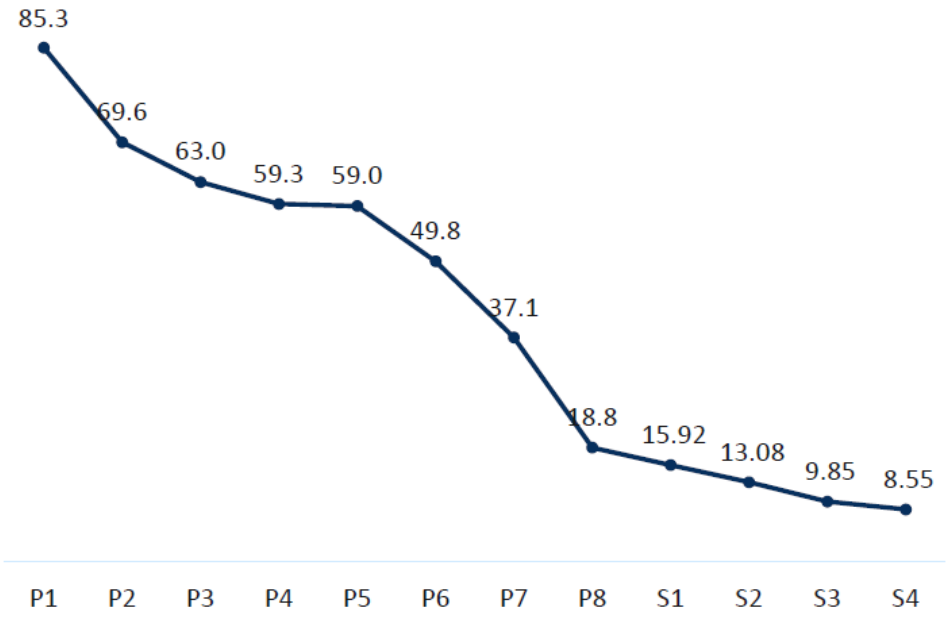
2.4.3. Findings from South Sudan education sector analysis reports

Findings from the education sector analysis in South Sudan (ESA) were shared at a conference in February 2023. Some of the findings are relevant to the ongoing CT study.

The ESA found that South Sudan had the lowest gross enrolment rates at primary and secondary levels of education of all countries in the East African Community (ESA, 2023a:Slide 21) and of African countries experiencing a medium-intensity level of conflict (ESA, 2023a:Slide 22).

According to the ESA, the number of primary schools has increased by 9.8% from 2018 to 2021, while the number of secondary schools has increased by 69% from 297 to 501 secondary schools (ESA, 2023a:Slides 12-13). The ESA found that 63% of primary schools were public (government) schools, while 22% were community schools, 8% were faith-based schools, and 5% were private schools. They found that 35% of secondary schools were public (government) schools, 20% community schools, 18% faith-based, and 26% private schools (ESA, 2023a:Slide 14).

Figure 2: Cross-sectional school profile (Gross Enrolment Rate) in South Sudan 2021

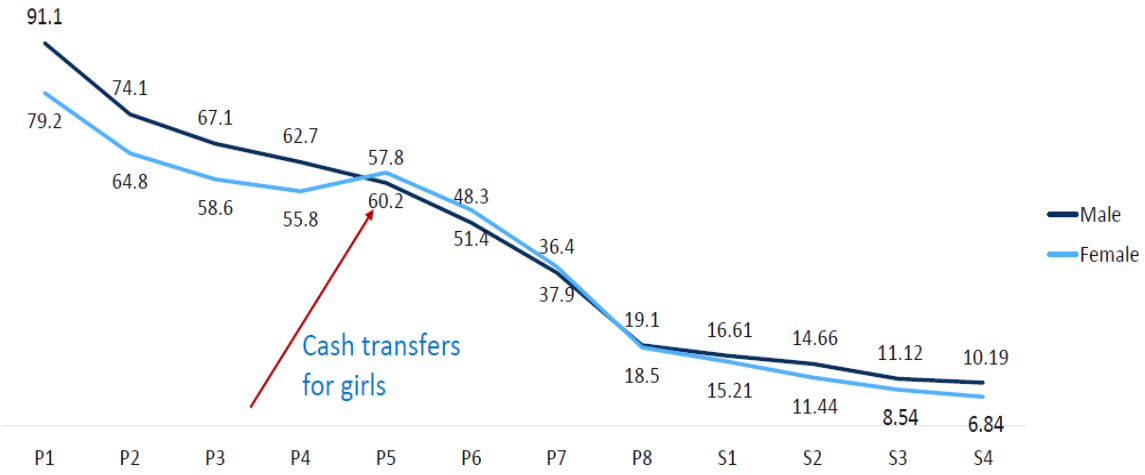


Source: ESA (2023a:Slide 38)

The ESA found a continuing gender imbalance in primary and secondary schools, with a gender parity index of 0.89 in primary schools (girls made up 47% of enrolled students) and 0.77 in secondary schools (girls made up 43.5% of enrolled students) (ESA, 2023a:Slide 31).

In terms of completion, the ESA found a primary completion rate of 18.8 per 100 children, and found 'a gap in student's transition to secondary education suggesting barriers of access between cycles' (ESA, 2023a:Slide 31)

Figure 3: Cross-sectional school profile (Gross Enrolment Rate) in South Sudan by gender 2021



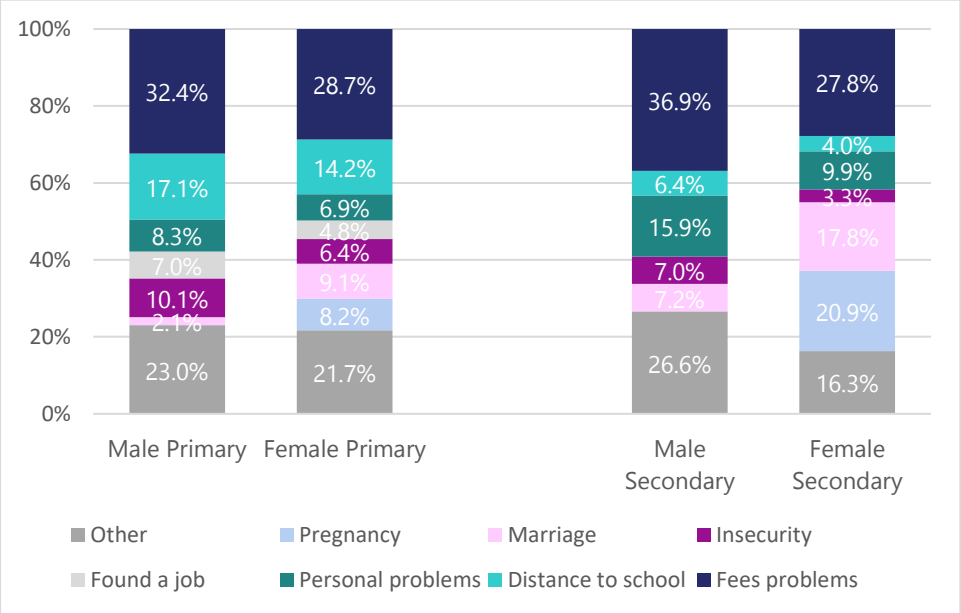
Source: ESA (2023a:Slide 40)

The ESA noted a change in gross enrolment rate by gender which corresponds to the introduction of cash transfers for girls starting in P5. Girls' gross enrolment rate is lower than boys' until P5, where it increases to exceed boys' gross enrolment rate by two percentage points and stays above boys' until P8.

The ESA noted that a student's school life expectancy – that is, the average number of years in education – varies widely by state, ranging from 10.4 in Western Bahr-el-Ghazal to 2.3 in Eastern Equatoria.

The ESA noted that the most common reason for dropouts was problems in accessing fees, with this as the main reason given for dropout for 32% of male and 29% of female students in primary, and 37% of male and 28% of female in secondary schools. This was followed by long distance to school, given for 17% of male and 14% of female students in primary and 6% of male and 4% of female students in secondary schools, and personal problems given for 8% of male and 7% of female students in primary, and 16% of male and 10% of female students in secondary schools. The ESA (2023a:Slide 62) noted that 'the main reason for dropout is 'fees problems' with a higher proportion for males'. This is represented by the large light blue bands in Figure 2 below.

Figure 4: Distribution of dropouts by reason and level of education, 2021



Source: ESA (2023a:Slide 58)

Drawing on data from the 2017 High Frequency Survey, The ESA calculated that the median household spent 52% of their non-food expenditure on educational expenses, rising to 78% for the poorest quintile of households. Analysis suggests that 'given low levels of enrolment as observed in Chapter 2, we have to consider that many households do not spend on education simply because they cannot afford to have a child enrolled.' (ESA, 2023b:Slide 27).

The ESA reported that the Education Sector Public Expenditure Tracing Survey (PETS) 2022 found that the cost of fees and basic supplies for a primary school student totalled 20% of the reported GDP per capita, while the same for a secondary school student totalled 36% of reported GDP per capita. The total cost per child was estimated at USD 144 (GBP 110) for primary and USD 268 (GBP 205) for secondary, with secondary school fees alone 2.5x higher than those charged for primary school (ESA, 2023b:Slide 28).

2.4.4. Other secondary data

The study makes use of available secondary data on enrolment, attendance, and retention captured through the SAMS database, and data provided by MoGEI on dropouts, repeaters, and P8 exam results.

The capitation grants research study was conducted alongside a similar cash transfers research study (Montrose, 2023). Relevant analysis from the cash transfers study, particularly around the effect of cash transfers on enrolment, was incorporated into the final version of the capitation grants study. However, Crawfurd (2016:16) found that there were no significant interactive effects between cash transfers and capitation grants at schools, so these have been modelled separately.

A discussion with the Output 3 lead on SMC training found that very few schools had benefitted from SMC training, with only two schools identified as having received any training that could be relevant to financial management. Therefore, schools having received SMC training was removed as a dimension of the sampling framework. Output 3 school management was the subject of a separate research piece and will be included in the programme endline.

BBC Media Action was responsible for running an awareness campaign under 'Output 1' of the second phase of GESS. Questions on radio listenership were asked of students, head teachers, parents, and SMC/BOG members, but analysis of responses was beyond the scope of the present study.

3. Methodology

3.1. Study design

The CT research study is exploratory in nature. No relevant literature was found on the potential effect size that cash transfers could have on the variables of interest, namely enrolment, retention, or attendance, and so the survey was designed to identify a minimum detectable effect (MDE) of between 0.3 and 0.4 standard deviations between treatment groups and between treatment and control groups. This is a benchmark taken indirectly from achieved targets around attainment in the Girls' Education Challenge for four-year programmes delivering in conflict-affected states including South Sudan and from the Global Partnership for Education (GPE) South Sudan programme.

The sample size was designed so that a 'null' statistical result from the surveys would still provide evidence of two findings: First, a null result between girl treatment and girl comparison groups would show that the measurable effect of cash transfers on enrolment, retention, and attendance is less than the minimum detectable effect of the study. Second, a null result between girl treatment and boy comparison groups would show that there was no significant difference between girls and boys in South Sudan, and that the gender gap had closed between girls receiving cash transfers and their male peers to below the minimum detectable effect on these indicators. The use of two comparison groups ensures that the research study would either register a significant difference between treatment and comparison groups or else show a 'positive' result that there was no significant difference between boys and girls on the outcomes of interest.

The study followed a quasi-experimental method using a statistically representative survey to isolate the effect of cash transfers on girls in South Sudan by comparing the enrolment, attendance, and retention of a sample of girls receiving cash transfers against a smaller cohort of girls in the same classrooms who did not receive cash transfers. The sample was further split into P5, P8 and S2 cohorts to test the effects of cash transfers at different levels and amounts. The survey was supplemented by key informant interviews with selected girls and their parents or caregivers to understand household decision-making around cash transfers and the broader context for the programme.

3.2. Approach

The study gathered primary data through two means, a school survey and a household survey. The school survey was designed to be a representative survey of students in schools benefitting from the GESS cash transfers. We utilised simple random sampling from a list of all eligible students, as the GESS teams were being deployed to visit every eligible school in South Sudan to facilitate cash transfers. This approach removed the need to account for the design effect of clustering students by school, as is normally used in sampling, and minimised the overall burden for State Anchors and respondents alike.

The household survey was designed to be a quota-based framework for qualitative interviews.

3.3. Quasi-experimental method

The school survey followed a quasi-experimental method as there was no suitable control group and it was difficult to identify a comparison group for the intervention as the GESS cash transfers were designed to reach as many eligible girls as possible. The implementation team confirmed that for the 2021 round of cash transfers, 80% of girls met the eligibility requirements of at least five attendance reports, and over 95% of eligible girls were present to receive these transfers. In 2020, due to the COVID-19 pandemic and school closures, the programme suspended attendance requirements and sought to support all girls identified as enrolled via several rounds of cash transfers. Because of this, only 9% of the girl students in the representative dataset reported never having received a cash transfer, while 38% reported receiving zero or one cash transfers. Girls who reported receiving zero or one cash transfers were therefore defined as **‘no cash transfer girls’ (NCT girls),** while girls who reported receiving two or more cash transfers were therefore defined as **‘cash transfer girls’ (CT girls).**

3.4. Comparison group

The quantitative study defines the comparison group of **'no cash transfer girls' (NCT girls)** as girls who received zero or one cash transfer, assuming that girls who received one cash transfer received it in 2020 when this was not conditional on their attendance. As the quantitative analysis focused on the effects of cash transfers on individual girls, the school survey did not attempt to account for spill over within NCT households where siblings may have received CTs.

Boys made up 12% of the quantitative sample and were not eligible to receive cash transfers. They therefore form another comparison group, although the literature has identified differences in enrolment and reasons for dropout between boys and girls.

The qualitative study identified a sub-set of households who had not received any cash transfers by first screening the targeted girl to confirm she had not received any cash transfers and then checking that she did not have any girl siblings in P5-S4 who were eligible for receiving CTs. Household composition and ineligibility for CTs was then cross-checked with the parent or guardian in the household.

3.5. Comparisons with baseline and the first phase of GESS

Because the start of the second phase of GESS was delayed, no girls received cash transfers in 2018. This year can therefore be considered a baseline comparison point for secondary data such as school enrolment, attendance, and attainment. The first phase of GESS finished in 2018 and the endline report was published in August 2018; along with the baseline and midline information this serves as a point of comparison for the second phase of GESS.

3.6. Target and achieved samples for school survey and household interview.

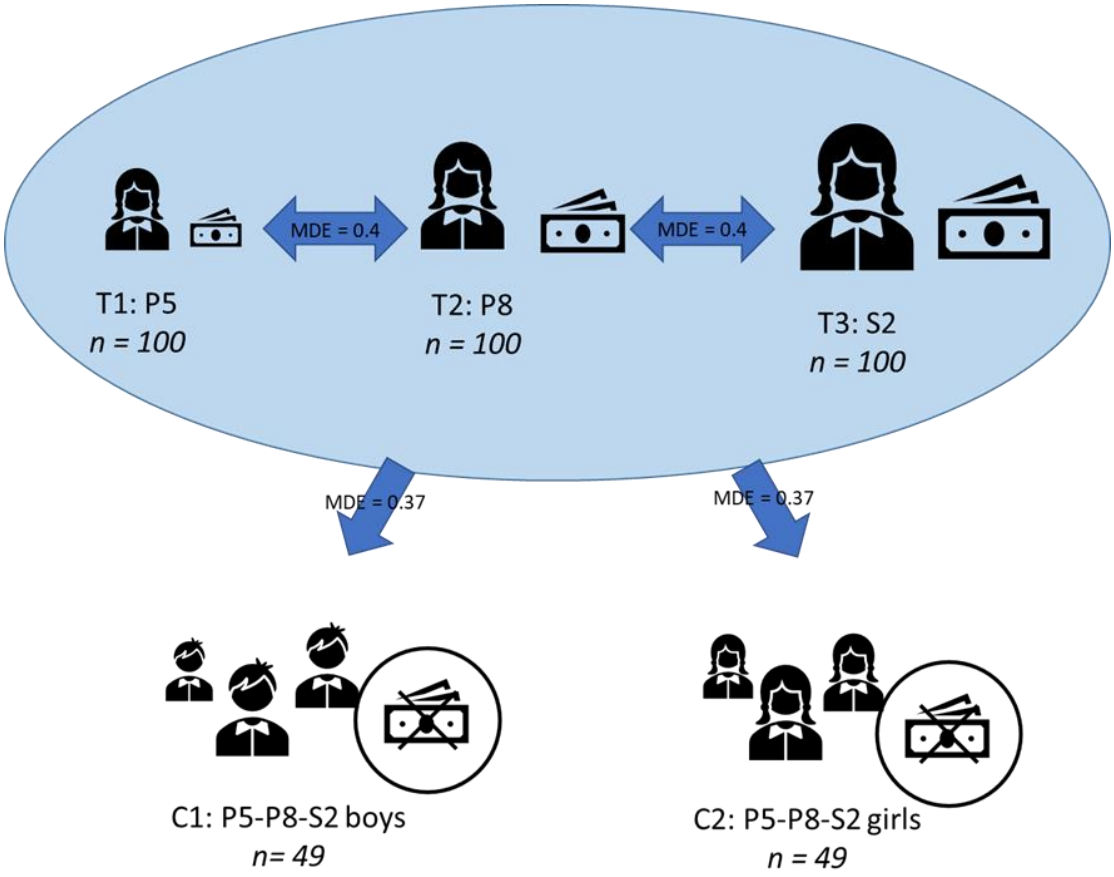
The study targeted a simple random sample of 400 students in primary and secondary schools across 10 states in South Sudan. The sample targeted girls in three cohorts, P5, P8 and S2, which were identified in the first phase of GESS as key inflection points where girls were at risk of not transitioning. Because in the second phase of GESS the cash transfer amounts varied by grade, this sampling was also designed to test the appropriateness of the cash transfer amount for both primary and secondary students. The sample targeted a 2:1 split between primary and secondary schools. This represents an oversampling of secondary schools, in line with the 60-40 split between primary and secondary schools used for the evaluation in the first phase of GESS.

The base minimum sample size (actual $N = 244$) was calculated using G*Power for a confidence interval (alpha) of 95%, power (beta) of 80%, allocation ratio of 4:1 for a minimum detectable effect (MDE) of 0.4 between treatment and intervention groups. A one-tailed hypothesis was used, as cash transfers were found to have had a positive correlation with the outcome variables of attendance, retention, and enrolment (Crawfurd, 2016).

To facilitate comparison between treatment cohorts, for instance -to see whether the cash transfer amount was sufficient for P5, P8, and S2 treatment groups at the same minimum detectable effect - the final sample size was increased to 100 girls in each treatment group, with a calculated confidence interval (alpha) of 95%, power (beta) of 80%, allocation ratio of 1:1, minimum detectable effect (MDE) of 0.4 between treatment cohorts, and two-tailed hypothesis.

The target sample further included two comparison groups of 50 girls who did not receive cash transfers, drawn from all grades, and 50 boys who were not eligible to receive cash transfers from the same classrooms as the treatment girls. This brought the overall target sample size to $N = 400$.

Figure 5: Overall school survey sample distribution, by cohort and comparison group



The target list of students was drawn from lists of enrolled girls from the SAMS database whose eligibility for cash transfers was to be assessed in 2022, plus the names of enrolled boys using a probability proportional to size approach (PPS) based on school enrolment. This effectively meant that every student in a school targeted by GESS had an equal probability of being selected. Enumerators were given the name and details of each target student and up to four replacements in case the original student was absent on the day. Most schools were represented by a single student, but for some schools, especially secondary schools, up to five students from the same school were drawn, plus four replacements for each student. No quotas for states or students with disabilities were enforced.

3.6.1. School Survey Achieved Sample Size

The enumerators achieved 85% of the target sample size, with 339 valid submissions achieved from the target sampling frame of 400 students. Enumerators reached an average of 80% of target students in Lakes, Northern Bahr-el-Gazal, and Unity States due to flooding and active conflict; they reached an average of 90% of students in other states. This sample is referred to as the **representative sample** *(N* = 339) in the report.

Table 3: School survey achieved sample

State	% Sample	Total # students	Total primary students	Primary schools				Total secondary students	Secondary schools		
				Treatment		Comparison			Treatment	Comparison	
				P5	P8	NCT	NCT		S2	NCT	NCT
				girls	girls	boys	girls		girls	boys	girls
CES	20.1%	68	42	1	21	6	14	26	24	0	2
EES	5.0%	17	6	1	2	0	3	11	11	0	0
JGL	1.5%	5	5	1	0	1	3	0	0	0	0
LKS	13.9%	47	44	3	25	1	15	3	3	0	0
NBG	13.3%	45	32	6	14	3	9	13	7	3	3
UNS	3.2%	11	8	0	5	0	3	3	2	0	1
UTY	16.8%	57	44	9	11	5	19	13	12	0	1
WBG	15.9%	54	31	1	10	3	17	22	17	4	1
WES	8.6%	29	18	2	3	3	10	9	6	2	1
WRP	1.8%	6	1	0	0	0	1	5	0	5	0
Total	**100%**	**339**	**231**	**24**	**91**	**22**	**94**	**105**	**82**	**14**	**9**

However, because of a misunderstanding of the enumeration protocols, many enumerators sampled the target student and multiple replacements at a single school. This resulted in a significant oversample of 553 valid surveys, but from multiple schools. This oversample dataset was used to confirm findings which were near-significant in the representative sample and run tests on the individual level. However, it is subject to clustering effect because of multiple respondents from the same school. This dataset is referred to as the **oversample** (*N* = 553) in the report.

The quotas of the target sample were met. The representative sample and the oversample both achieved a target 4 to 1 split between intervention and comparison groups with 82% of representative sample reporting they had received at least one CT and 18% reporting they had never received a CT. Both samples were also split evenly between P5, P8, and S2, with the representative sample achieving a 34-35-31% split. The samples were also close to the target 2:1 ratio of primary to secondary students, with a 69-31% split in the representative sample. The under-sampling within the representative survey affects its power and ability to detect statistically significant differences but it was not notably biased, except for the inability to reach some of the more flood- and conflict-affected areas in South Sudan.

No quotas for students with disabilities were enforced (See Limitations in Section 3.7.3 below). A closer analysis of disability was conducted by targeting 10 households with students with disabilities for the household interviews. See Section 4.1.1 below for more details on disability.

3.6.2. Household interview target and achieved sample sizes

The household interviews targeted three different types of households with a target of one of each type per state. Households were screened for eligibility through the school survey, and enumerators followed up with eligible households the next day.

Enumerators had difficulty identifying Type II disability across all states, as there were very few moderate or severely disabled students present in school during the fieldwork. Therefore, four households in the sample have students with moderate or severe disability, and the rest have multiple children with mild disabilities or a child with multiple mild disabilities. Although enumerators had selected 11 households as eligible for Type III interviews, on cross-check three of these interviews were removed as eligibility was not confirmed in the interview. Therefore, additional interviews were added to Type I for analysis to compensate.

Table 4: Target and achieved household interviews by type

	Type	Target	Achieved
I	Households benefitting from multiple cash transfers Eligibility: Respondent is girl says she has received a cash transfer and reports eligible girl(s) P5-S4 in her household	10	11
II	Households with a student with a disability. Eligibility: Respondent or another member in R's household identified as having at least a mild disability	10	10
III	Households not benefitting from any cash transfers. Respondent is male and no other household member is eligible to receive a cash transfer (i.e. no girls P5-S4)	10	8

Not all states screened eligible students in all categories through the student survey, particularly in the less sampled states. Additional eligible interviews were added to the sample to be analysed from other states to achieve the target distribution.

Table 5: Achieved household interviews, by type and state.

State	Type I	Type II	Type III	Total
CES	1	2		**3**
EES	1	1	1	**3**
JGL	1	1		**2**
LKS	2	1	2	**5**
NBG	2			**2**
UTY	1	1		**2**
UNS		1	1	**2**
WRP	1		1	**2**
WBG	1	1	1	**3**
WES	1	2	2	**5**
Total	**11**	**10**	**8**	**29**

3.6.3. Survey Protocols

Survey visits were unannounced and were designed to take place randomly either just before or just after cash transfers were received. This was designed to test whether there was a significant decrease in attendance once girls have received the cash transfers. These questions of timing were one of the key issues raised by the evaluation in the first phase of GESS.

Survey materials were provided to State Anchors in English. State Anchors used simultaneous translation into respondents' mother tongue where appropriate. South Sudan has over 40 oral languages and orthographies are not fully developed, so the survey materials did not undergo written translation.
State Anchors did not report any instances where linguistic barriers prevented survey completion.

3.7. Limitations

3.7.1. Lack of a comparison group

In his paper 'Cash Grants for Schools and Pupils can Increase Enrolment & Attendance Despite Ongoing Conflict: Findings from South Sudan,' Crawfurd (2016:11) used a 'natural experiment' within

the administration of GESS whereby an administrative error delayed issuance of cash transfers and capitation grants to about a quarter of schools in 2015, providing a natural control group of schools.

The second phase of GESS has sought to maximise cash transfers to all eligible girls in South Sudan, and as such there was no clear counterfactual or similar comparison group of girls who have not received cash transfers. The setup was further contaminated by the programme decision to suspend conditionality based on attendance in 2020 due to the COVID-19 pandemic and attempt to provide cash transfers to all enrolled girls during that period.

These conditions made it difficult to identify a group of NCT girls but were otherwise like girls who had received one or more cash transfers. The present study was therefore designed to see whether variations in amount, i.e. the number of cash transfers a girl student received, or the percentage of girls in a school who received a cash transfer, significantly correlated with outcome variables of interest.

In 2020, with the onset of the pandemic, schools in South Sudan closed in March 2020 and remained closed for the rest of the year, except for exam classes that resumed in October 2020. Additional funding meant that cash transfers in Year 2 were GBP 22 compared to the Year 1 amount of GBP 11. The programme decided to support all enrolled girls with multiple cash transfers, dropping attendance requirements because schools were closed. Two rounds of payments were made – the first in May 2020 while schools were closed and the second in November 2020 using validated data (GESS, 2022b:25).

As a result, when conducting the school survey, it was difficult to find girls who reported receiving no cash transfers, as all enrolled girls were targeted to receive two rounds of cash transfers in 2020. Those girls that reported receiving no cash transfers may have been from inaccessible areas or else moved to a GESS eligible school from an ineligible school. In the representative sample, 25 girls were found who had never received a cash transfer, rising to 35 in the oversample. For quantitative analysis, we ended up defining the comparison group of 103 NCT girls as girls reported receiving zero or one cash transfers. It was assumed that the only cash transfer most of these girls received was in 2020, when all girls were targeted to receive cash transfers regardless of attendance.

3.7.2. ‘Survivorship bias’ - speaking to children enrolled in schools

Because primary data was collected at school, it carries a ‘survivorship bias’ and represents only those students who were enrolled in school and were present on the day of the survey. According to the Education Sector Report (ESA, 2023a), an estimated 60% of South Sudan students are out of school. The study was not designed to capture reasons why children have dropped out of school or stayed out of school. As such, the findings represent children who have remained enrolled and attended on the day and are not compared with out-of-school students who may not have been incentivised to enrol because of cash transfers or indeed may never have heard of the programme.

3.7.3. Identification of children with disabilities

The ’survivorship bias’ also had a particular effect on identifying children with disabilities in the study. The prevalence of students in the sample reporting a moderate or severe disability was small (1.8% of the total), and the resulting group was not large enough to generate differences that were statistically significant. Due to low numbers of these students, it was also difficult to identify students with moderate or severe disabilities for inclusion in the qualitative household interviews. Although 17.4% of the sample of students reported having a mild disability across one or more of the Washington Group categories, there was no pattern of students reporting a mild or greater disability being significantly different than for those reporting no disability. This suggests that mild disability is not a useful analytical category, and that children with moderate or severe disabilities are under-represented amongst students with disabilities in schools (See Section 4.1.1 below). Together this limits the findings that can be drawn about students with disabilities in this study.

3.7.4. Exchange rate fluctuations and depreciations of SSP and GBP

Economic analysis throughout the report was complicated by the unreliability of the official exchange rate between SSP and USD, the massive depreciation of the SSP since the beginning of the first phase of GESS, and the devaluation of the GBP against the USD. The SSP has dropped from a rate of SSP

4.85 : GBP 1 in March 2014 to SSP 944 SSP : GBP 1 in March 2023, a devaluation of nearly 2,000% (fxtop.com), and has lost nearly half its value in the last year alone (March 2022-March 2023), while the GBP has lost 12% of its value against the USD over the implementation period of the second phase (2018-2022).

As such, analysis is sensitive to the exchange rates used, especially in the last years of the programme, and comparisons with prior findings are subject to differences in exchange rates. To promote comparison with prior findings, exchange rates were used at the end of the programme fiscal year (31 March of each year). The exception to this was costs reported by respondents during fieldwork, when the November 2022 exchange rate was used. The numbers here are somewhat different than in the School Finance Report (GESS, 2021) and the school survey and household surveys (GESS, 2018a, 2018b). Where possible, findings from these reports have been converted from SSP to GBP using the rates below to ensure consistency of comparison.

Table 6: Summary of exchange rates used in the report

Currency	FY 2014	July 2018	Nov 2018	FY 2019	FY 2020	FY 2021	FY 2022	Fieldwork Nov 2022	FY 2023
SSP:GBP	5.88	156.47	183.68	203.45	198.56	245.08	562.48	735.35	943.67
SSP:USD	3.53	118.92	130.43	155.43	160.65	178.11	428.64	618.13	779

Source: Fxtop.com (2023)

3.7.5. Limited education and training for available enumerators

The CT study made use of State Anchors and locally recruited enumerators to conduct research, rather than contracting a local independent research company. Education is limited in South Sudan, with very few university graduates, particularly outside Juba. Due to ongoing conflict and community tensions in South Sudan, enumerators needed to be recruited from the same locations and speak the local language(s). The qualifications of enumerators were therefore limited by their availability and the general level of education in the country and the quality of data, particularly the depth and richness of qualitative data, are limited as a result.

3.7.6. Limited availability of programme data

In the cash transfer design document and the resulting approach to the research, we assumed that requested data held by the GESS programme and the MoGEI would be provided in a timely manner to be incorporated into the research. However, the following data had not been provided by the time the study was finalised:

- EMIS data on enrolment disaggregated by year and school, which seems to have differed from SAMS data and shows an overall decrease in girls' education. This limited our ability to cross-check SAMS enrolment data or analyse potential discrepancies in this data to answer EQ1.
- SAMS data on individual girls' attendance or attendance by classroom, attendance data to show how girls were determined to be eligible for receiving cash transfers, or any data on girls who were determined to be ineligible for receiving cash transfers during a given year. This limited our ability to cross-check attendance data and answer EQ2.
- SAMS data on which girls actually received cash transfers, except for 2021, which limited our ability to cross-check girls' responses or confirm that they had actually received cash transfers in the secondary data analysis for multiple EQs, including for the 'no cash transfer group' where we assumed most girls who reported receiving a single cash transfer did so in 2020 when it was not conditioned on attendance.
- EMIS retention data. SAMS does not seem to have the capacity to track students from one year to the next using consistent ID numbers, and the GESS programme reported on the retention indicator by looking at net change in enrolment. This limited our ability to answer EQ3 on retention.
- EMIS attainment data for students, except for CPE (P8) results for 2021, which could not be linked to P8 students in 2022 because this was a different cohort. This limited our ability to answer EQ4 on attainment.
- Programme data on actual exchange rates. South Sudan's official exchange rate does not reflect the real value of cash transfers or capitation grants, or the actual costs to the programme. As such,

exchange rates were proxied as the exchange rate provided by fxtop.com at the end of each programme year (31 March), or at the time cash transfers were made, but may not accurately represent actual costs or values. Later years are particularly sensitive to these assumptions, as there was pronounced volatility in the SSP to GBP exchange rate, while GBP itself lost value against the USD over the implementation period.

4. Findings

4.1. Demographics

4.1.1. Disability

The school survey used Washington Group short form questions so students could self-identify disability. In the representative sample, 17.4% of students reported having a mild disability and 1.8% of students surveyed reported a moderate or severe disability across one or more of the six Washington Group categories. This aligns well with a study of 1,916 students conducted by GESS that identified 1.5% of students in schools of having a moderate or severe disability (GESS, 2021b) and the Distance Learning Report conducted in March 2021 which found that prevalence of disabilities did not surpass 2% of the total (Mott MacDonald, 2021).[4]

A Knowledge for Development (K4D) helpdesk report on disability in South Sudan (Rohwerder, 2018) noted that there were no official statistics for disability in South Sudan; however, a regional study in Aweil East and Magwi (SSH4A, 2014) and a nationally representative household survey (WFP, 2017) estimated that 16.7% and 15% of households, respectively, had at least one disabled family member in them. A study of four Greater Bahr-el-Ghazal states using a multi-stage random cluster design and the Washington Group Short Measurement Set on Disability found that 13.4% of respondents reported a moderate or severe disability and 3.6% reported a severe disability. Based on the best available evidence, this suggests that students with moderate or severe disabilities may be significantly under-represented in the school survey, with an estimated 85% of students with moderate or severe disabilities not found at school, 5.5 times the number of students with disabilities found in school during the survey.

4.1.2. Vulnerability

We created an index of social vulnerability from 14 variables[5] that were originally developed by Leonard Cheshire for use in a study on children with disabilities and asked them to all students (GESS, 2021c). The average score was 10.4. Girls who hadn't received any cash transfers did not have an index score significantly different from those who had received one or more cash transfers, and the number of cash transfers reported received was not significantly correlated with the index.

There was a highly significant difference between students reporting no disability (M=9.8, sd=3.9) and students reporting a mild or greater disability (M=12.4, sd = 4.2), t (466) = -5.28, p = .000. This suggests that even students with a mild disability may be more socially vulnerable than those with no disability.

4.1.3. Spending the cash transfers

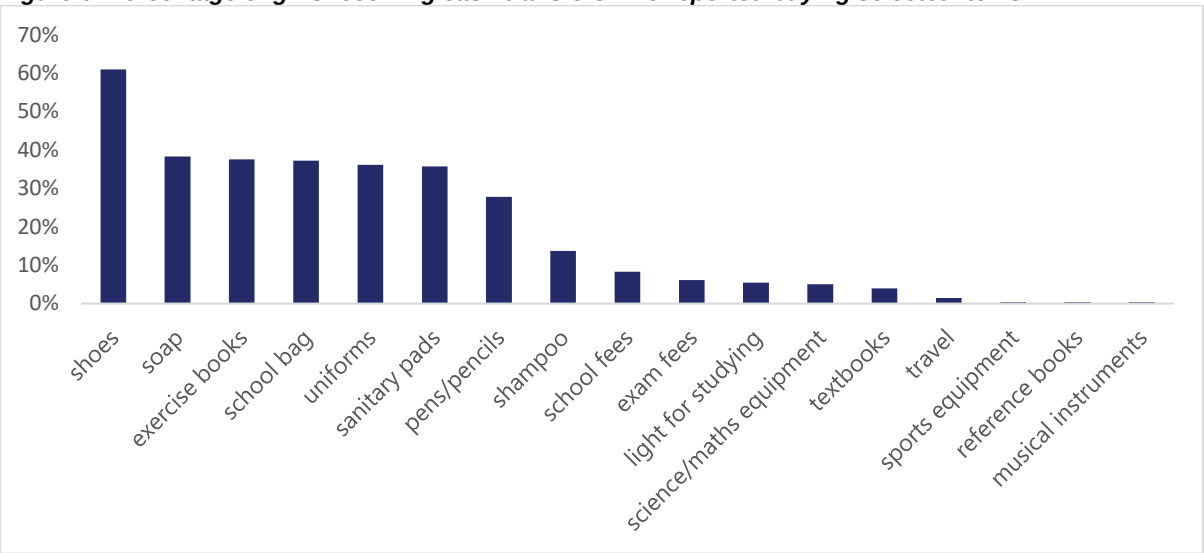
[4] The study, which was about the effectiveness of distance learning and the reach of radio programming during the period of school closures in 2020, did find that 6% of listeners reported having difficulty understanding radio programming but this was due to differences in language. The Washington Group question has been modified to read, 'In the primary language you speak at home, do you have difficulty communicating with family or friends' to distinguish difficulty understanding due to disability from difficulty understanding due to differences in language.

[5] These questions asked whether children were socially active, faced any kind of violence in school, were made fun of/bullied in school, felt self-conscious in social situations, felt they were a burden to others, felt that preference was given to other children in the family, felt that their family invested in their health and education as much as other family members, were excluded from activities, felt they were favoured more than their peers in social situations and/or at home, faced any kind of discrimination, had equal access to information as their classmates in school and in general, had similar access to learning materials and learning devices as their classmates in school and in general, had comments that were appreciated in class and social situations as much as their classmates, and had ever been physically punished at home or at school (Leonard Cheshire Disability 2021). Responses used a four-item Likert scale of never = 0 to always = 3, with reverse-coding for questions indicating more vulnerability. This produced an overall index of 0 to 42.

Girls reported having used their last cash transfer to pay for a wide variety of relevant items to support their education and other day-to-day needs (See Figure 6).

Most of the girls said they were involved in deciding what to purchase with the cash transfer, either directly or jointly with their family. 69.6% of the girls said they had decided on the items to buy, while 23.2% said that they and their family decided together. Only 6.5% said their family decided for them.

Figure 6: Percentage of girls receiving cash transfers who reported buying selected items.



Girls were also asked to provide an estimated percentage of the amount spent on each item they mentioned. Girls reported spending two-thirds of the amount of CTs on personal items (shoes, soap, school bags, uniforms, and sanitary pads), while a sixth was spent on school supplies (pens/pencils, exercise books, textbooks, science/math equipment), and very little (6.2%) spent on school or exam fees.

Table 7: Percentage of cash transfers girls reported spending on selected items[6]

Item	%	Item	%
Shoes	23.8%	Exam fees	2.0%
School bag	16.6%	Textbooks	1.5%
Uniforms	15.0%	Shampoo	1.0%
Sanitary pads	10.9%	Science/mathematic equipment	1.0%
Exercise books	7.7%	Travel	0.3%
Soap	5.9%	Reference books	0.2%
Pen/pencils	5.7%	Sports equipment	0.0%
School fees	4.2%	Musical instruments	0.0%
Light for studying	4.2%		

4.2. EQ1: Has the distribution of cash transfers affected girls' enrolment between P5 and S4? If so, how has this differed by school level and by girls with disabilities? If not, why not?

Girls' enrolment has increased during the second phase of GESS implementation period.

During the implementation period for the second phase of GESS, girls made substantial gains in terms of enrolment, and according to SAMS enrolment data, at the time of the research, had overtaken boys in both primary and secondary schools in South Sudan. According to SAMS enrolment data, the gender ratio for primary school in 2022 was 1.27:1, meaning there are now 1.27 girls enrolled in primary school

[6] Including zero scores where students did not report spending any of their CT on the item. On average, girls under-estimated their percentages, with all reported percentages adding up to 61%. The percentages reported in the table have been adjusted so that percentages add up to 100% but the proportional spend remains the same.

in South Sudan for every boy enrolled in primary school. The gender ratio for secondary school was 1.01:1.

The average enrolment per class in primary in 2022 was 26.6 boys and 33.7 girls, compared to an average enrolment per class in primary in 2017 of 28.9 boys and 25.9 girls. The number of enrolled boys has therefore dropped by 2.3 students (6.4%) on average per class since the baseline in 2017, while the number of enrolled girls has increased by 7.8 students (30%) on average per class.

The average enrolment per class in secondary in 2022 was 45.2 boys and 45.6 girls, compared to an average enrolment per class in primary in 2017 of 53.7 boys and 37.1 girls. The number of enrolled boys has therefore dropped by 8.5 students (15.8%) on average per class since the baseline in 2017, while the number of enrolled girls has increased by 8.5 students (22.8%) on average per class.

Table 8: Change in girls' primary enrolment by form, 2017-2022

	2017	2022	# Change	% Change
P5	30.3	35.4	5.1	16.8%
P6	25	32.7	7.7	30.8%
P7	19.7	29.9	10.2	51.8%
P8	18.5	28.4	9.9	53.5%

Table 9: Change in boys' primary enrolment by form, 2017-2022

	2017	2022	# Change	% Change
P5	30.5	26.5	-4.0	-13.1%
P6	25.8	23.8	-2.0	-7.8%
P7	22.4	22.7	0.3	1.3%
P8	24.7	24.6	-0.1	-0.4%

Table 10: Change in girls' secondary enrolment by form, 2017-2022

	2017	2022	# Change	% Change
S1	44.2	48.7	4.5	10.2%
S2	40.6	51.8	11.2	27.6%
S3	28.4	40.2	11.8	41.5%
S4	27.1	39.7	12.6	46.5%

Table 11: Change in boys' secondary enrolment by form, 2017-2022

	2017	2022	# Change	% Change
S1	69.2	49.6	-19.6	-28.3%
S2	60.3	48.2	-12.1	-20.1%
S3	40.7	39.9	-0.8	-2.0%
S4	43.1	42.2	-0.9	-2.1%

Source: SAMS enrolment data (2023)

Note that there may be survivorship and self-selection biases inherent in these statistics, as only 74.4% of primary and 52.2% of secondary schools had submitted enrolment statistics for both 2017 and 2022, and consists only of schools submitting data to the SAMS database.

However, it was not possible to isolate a statistically significant positive effect for cash transfers on girls' enrolment, notwithstanding the fact that both attendance and retention have been enhanced as a result of receipt of cash transfers, and that further research into this needs to be prioritised.

Crawfurd (2016) used a 'natural experiment' where an administrative error held up distribution of cash transfers and capitation grants in 2015 to test whether schools that received cash transfers were more likely to have significantly increased enrolment the following year. Using SAMS data and controlling for prior enrolment, conflict, location, ownership, and level, Crawfurd (2016) found that 'schools that receive cash transfers [grow] by at least 6% more than schools that do not' (p.15) and 'schools that receive

cash transfers increased their girl's enrolment share by 2%' (p.16). He also tested the number of cash transfers received by a school and found that this coefficient was 'positive but insignificant' (p.16).

We were unable to replicate these results using GESS data. As outlined in the 'Limitations' section above, GESS sought to maximise cash transfers for all schools during the implementation period, so we could not make use of a quasi-experimental setup in which some targeted schools did not receive cash transfers. Moreover, because of school closures due to COVID-19, all enrolled girls were targeted for cash transfers regardless of attainment in 2020, thus contaminating the intended conditionality of cash transfers and a comparison group of girls who said they had never received a cash transfer. Instead, for primary data analysis, our key analytical variable was girls who said they had received zero or one cash transfers (accounting for 2020), while for secondary data analysis, our key analytical variable was the percentage of girls eligible to receive cash transfers in a school.

We used linear regression models to test correlations between this key analytical variable and several independent variables: Number and percentage change in enrolment of boys and girls from the previous year, number and percentage change in enrolment in boys and girls from the baseline in 2017-18, number and percentage change in enrolment of boys and girls in the year after the cash transfer, and girls' enrolment share. We got similar results for all models. We present the results of the model most similar to Crawfurd's below:

A linear regression testing the percentage of enrolled girls eligible to receive cash transfers in a school and percentage change in share of girls' enrolment, controlling for prior enrolment, school type, and level,[7] found a very small but **statistically significant negative correlation** between the two variables.

Figure 7: Linear regression between percentage of girls enrolled receiving cash transfers in a school and difference in girls' vs boys' enrolment in the following year for the second phase of GESS implementation years

Year/Gender	Adjusted R square	F (df) = F, *p*	Standardized Coefficient B
2021	.014	F(3) = 22.6, *p* = .000	-.084
2020	.035	F(3) =47.4, *p* = .000	-.092
2019	.037	F(3) = 43.9 *p* = .000	-.154
2018	.039	F(3) = 45.2, *p* = .000	-.138

This can be interpreted as follows:

- Variation in the percentage of girls enrolled in a school eligible to receive cash transfers in a given year was significantly correlated with share of enrolment between girls and boys in the following year. The percentage of girls receiving cash transfers in a school explained between 1% and 4% of the variation in enrolment in any given year, and these results were less than 0.01% likely due to chance. For every percentage point increase in the percent of enrolled girls receiving cash transfers in a school, the share of girls' enrolment decreased relative to boys' enrolment by between 0.08% and 0.15%.

We also present a model which showed a positive correlation between the percentage of girls eligible to receive cash transfers in a given year and the difference in enrolment from baseline in the first year of implementing the programme. The correlation was not statistically significant and turned negative in the later years of the programme.

Figure 8: Linear regression between percentage of girls enrolled receiving cash transfers in a school and difference in girls' vs boys' enrolment from baseline (2017) for the second phase of GESS implementation years

Year	Adjusted R square	F (df) = F, *p*	Standardized Coefficient B

[7] Like Crawfurd, school type was government vs. non-government schools, and level was primary vs. secondary. We were unable to control for conflict or remoteness because this data were not made available. Conflict did not affect the second phase of GESS as much as in 2015-16, and there were no state-by-state distribution problems that made location a variable to be controlled for in the first study.

2022	.002	F(6,547) = 16.9, *p* = .000	-1.16
2021	.001	F(9,210) = 6.52, *p* = .011	-0.27
2020	.000	F(11,426) = 5.39, *p* = 0.02	-0.20
2019		NS	
2018	.002	F(9,574) = 24.6, *p* = .000	1.2

This can be interpreted as follows:

- Variation in the percentage of girls enrolled in a school receiving cash transfers in a given year was significantly correlated with change in the difference in enrolment between girls and boys from enrolment at baseline (2017). The percentage of girls receiving cash transfers in a school explained between 0.2% and 0.0% of the variation in the difference in enrolment from baseline in any given year, and these results were less than around 1% likely due to chance.
- In 2018, for every percentage point increase in the percent of enrolled girls receiving cash transfers in a school, girls enrolment **increased** relative to boys' enrolment by 1.2 girls.
- From 2020-2022, for every percentage point increase in the percent of enrolled girls receiving cash transfers in a school, girls enrolment **decreased** relative to boys' enrolment by between 0.2 and 1.2 girls.

The present study does not give a clear explanation for why cash transfers are negatively correlated with girls' enrolment in later programme years. One explanation for this could be that schools and individuals that are more receptive to girls' cash transfers are schools demonstrating need, i.e. drops in girls' enrolment, but cash transfers are not fully offsetting this drop.

4.3. EQ2: Has the distribution of cash transfers affected girls' attendance between P5 and S4? If so, how has this differed by school level and for girls with disabilities? If not, why not?

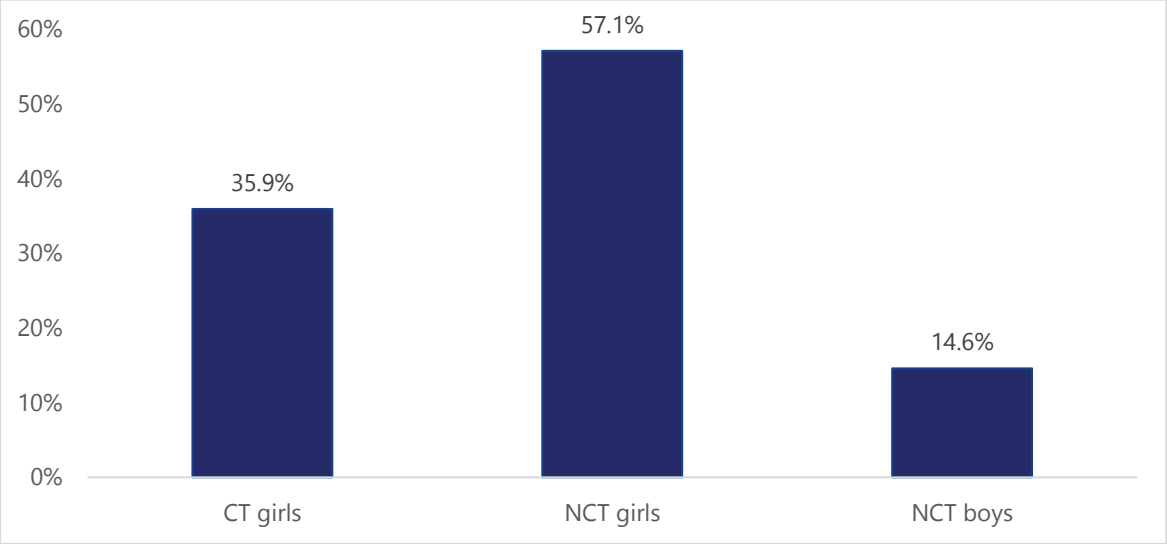
We would expect a strong link between the distribution of cash transfers and girls' attendance, because the distribution of cash transfers was conditional on a minimum level of attendance in all programme years but one.

Over the second phase of GESS, on average 88% of enrolled girls at target schools were eligible for cash transfers, and around 95% of eligible girls received the transfers. For all programme years but one, the distribution of cash transfers was conditional on a minimum level of attendance, with at least five attendance reports required in 2021. Although the programme team did not share data on attendance by the time of submitting the report, we would have expected that levels of attendance would have been strongly correlated with receipt of cash transfers for this reason. The subsequent analysis therefore looks past correlation between attendance and cash transfers to draw out other findings around attendance.

CT girls were less likely to report missing more than two days of school at a time than NCT girls, and both groups still missed more school than boys.

Participant students were asked whether, for any reason other than the COVID-19 pandemic, they have missed school more than two days at a time during the last year. In the oversample database, CT girls were significantly less likely to have missed school than NCT girls, t (434) = -2.50, *p* = .013, but still more likely to have missed school more than two days at a time compared to their male classmates, t(454) = 3.18, *p* = .002. With 57% of NCT girls reporting a longer absence, NCT girls were about 1.6 times more likely to report longer absences than CT girls (36%), who were in turn two and a half times more likely to report longer absences than boys (15%). We tested differences in the percentage of students reporting they missed school more than two days at a time by grade but did not find any statistically significant difference between grades.

Figure 9: Percentage of students missing more than two days of school in the last 2 months, by group

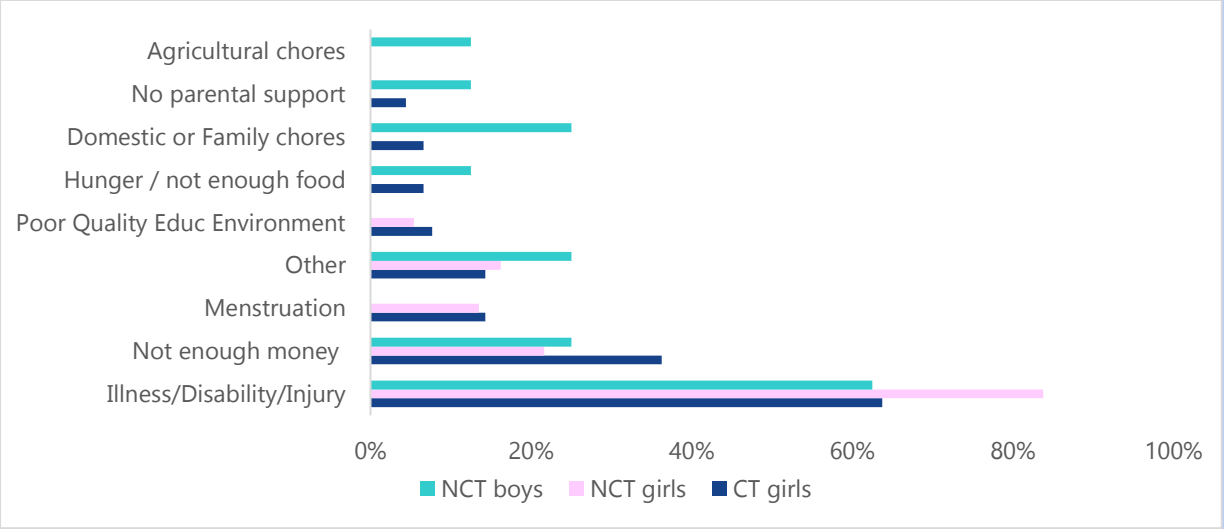


CT girls are significantly less likely to report long absences due to illness than NCT girls.

Even though enrolment figures show that now more girls than boys are registered at school, and that they are planning to continue studying. Girls' responses to our survey suggest that some of them are still struggling to keep attending school regularly.

As shown in Figure 10, there are a variety of reasons why they are missing school, but the most common reason given for absence was illness. 63% of CT girls who reported having missed school more than two days at a time said it was due to illness, disability or injury, compared to 84% of NCT girls. This difference was statistically significant, X^2 (1, n = 127) = 4.677, p = .031) and suggests that girls who have not received cash transfers were about 1.3 times as likely to report a long absence due to illness compared to girls who have received cash transfers.

Figure 10: Reported reasons why students have missed schools more than two days at a time, by group.

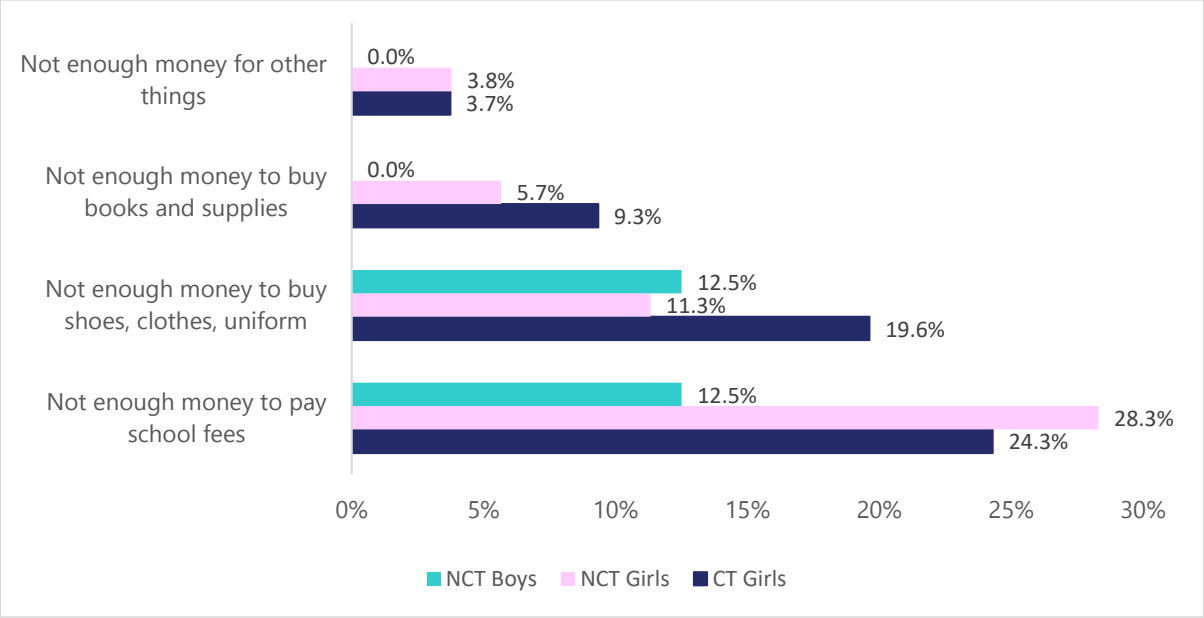


Girls receiving cash transfers were significantly more likely to be absent due to lack of money to buy shoes, clothes, or uniforms than girls who did not receive any cash transfers.

Figure 11 shows the financial reasons given for not attending school more than two days in a row. Only one category was significantly different, 'not enough money to buy shoes, clothes, or uniforms,' where CT girls were nearly twice as likely (19.6%) to say that they had been absent for two or more days compared to NCT girls (11.3%), t(158) = 1.32, p = .006, under a one-tailed hypothesis. This suggests

that despite receiving cash transfers, CT girls may still be more likely to be absent due to financial reasons than NCT girls, meaning that CTs have not covered all of girls' financial needs.

Figure 11: Financial reasons given for not attending school more than two days in a row, by group



There was no evidence that girls started attending less once they received their yearly cash transfer.

Gitonga et al. (2019) suggested that 'payment of CT at the start of the school year may weaken the CT's power to keep girls' attendance high throughout the year (girls may drop out after receiving the CT)' (p. 17). The present study was designed to test the hypothesis of whether students who had just received a cash transfer would be less likely to attend class than those who were still waiting to receive their cash transfer. Enumerators were given a list of students from those enrolled in the schools which were selected to fill a specific part of the sampling quota, i.e. girls eligible for cash transfers, girls ineligible for cash transfers, or boys, with a list of replacement students from the same category. An indication of whether the student was the student selected or a replacement because the original was unable to be found served as a measure of attendance on the day of the survey. Across the sample, 71% of students interviewed were those targeted, while 29% were replacements. This compares well to the GESS endline survey, which found 47% of girls who received CTs in 2017 were present for the fieldwork (GESS, 2018a:85).

The fieldwork was originally designed so that around half of the students would complete the survey just before receiving their cash transfer, and the other half would complete the survey just after receiving their cash transfer. Due to delays in fieldwork, 65% of the representative sample who reported receiving any cash transfer reported receiving their last cash transfer a few weeks or a few days before the survey, compared with 35% of the sample who reported receiving it more than a few months or a year earlier.

Nevertheless, there was no significant difference in attendance on the day for students who reported receiving their cash transfer a few weeks or a few days before the survey, compared to those who reported receiving their cash transfer more than a few months or a year earlier.[8] In the representative dataset, 33% of girls who reported receiving cash transfers a few days or weeks earlier were replacements, compared to 26% of girls who reported receiving their last cash transfer more than a few months earlier. This suggests that most students do not attend significantly less or drop out for the year once they have received their cash transfer for the year.

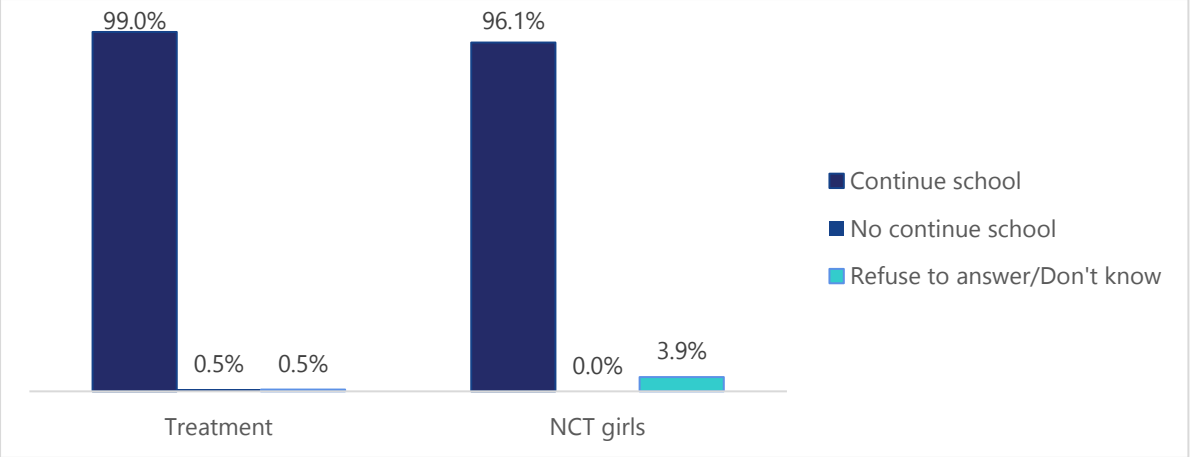
[8] This was proxied by a variable as to whether the student surveyed was a replacement for a student selected in the classroom who did not attend on the day, assuming all students at the school received their cash transfer at a similar time.

4.4. EQ3: Has the distribution of cash transfers affected girls' retention between P5 and S4, including drop out, and how have CTs supported transition from primary to secondary education specifically? If so, how has this differed by school level and by for girls with disabilities? If not, why not?

Girls receiving cash transfers were significantly more likely to report that they would continue attending school next year than either of the comparison groups. Here the significant increase in transition from primary to secondary by a significant number of girls during GESS 2 suggests that receipt of cash transfers had had a positive effect.

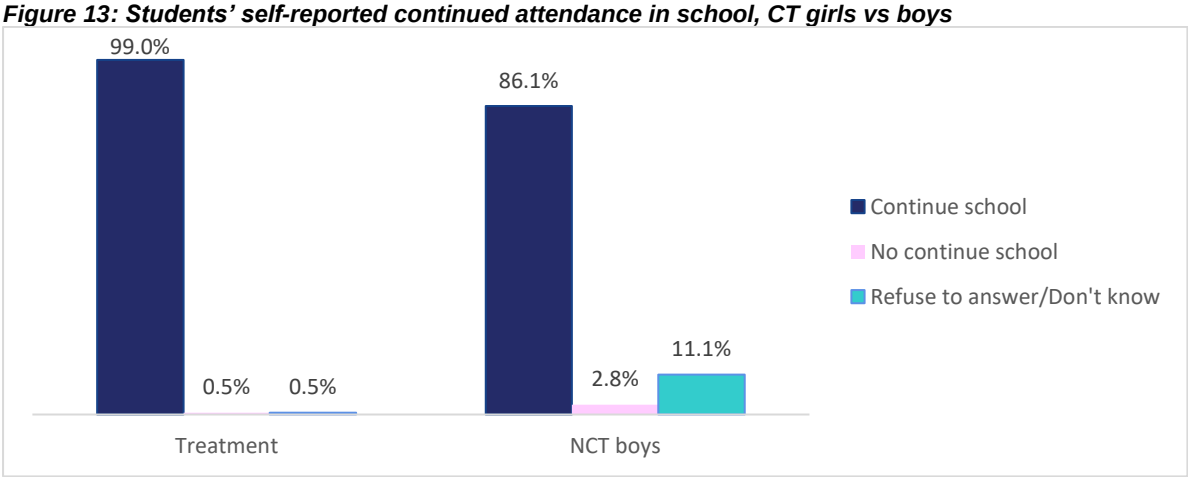
Girls who have received a cash transfer were found to be significantly more likely to report that they would continue school next year compared to their 'no cash transfer girls' (NCT) classmates (p=.019). 99% of the girls who have received a cash transfer responded that they are planning to attend school next academic year, while only 96.1% of the girls who have received only one or zero cash transfers reported they will continue school next academic year.

Figure 12: Students' self-reported continued retention in school, CT girls vs NCT girls



We compared girls who reported having received a cash transfer with their boy classmates who do not have this benefit by asking them if they think they will continue to attend school next year. CT girls were shown to be significantly more likely to report that they would continue school next year than the group of boys (Figure 12; p = .001).

Figure 13: Students' self-reported continued attendance in school, CT girls vs boys



We tested differences in the percentage of students reporting they would attend school next year by grade but did not find any statistically significant difference between grades. In general, P5 girls were less likely than other grades to report they would likely attend school the next year, consistent with dropout trends shown in Figure 3.

All girls with a disability responded they were planning to continue in school next year. The SAMS database does not track individual retention among students, but instead looks at changes in enrolment figures between grades. This analysis is therefore covered under EQ1.

4.5. EQ4: Has the distribution of cash transfers accelerated girls' educational attainment, and if so, how?

According to the ESA, the percentage of repeaters is relatively low, and as such, is not necessarily a good proxy of, or analytical variable for, educational attainment. The ESA reported with an average of 2.3% of students in P5-P8 and 1.3% students in S1-S4 repeating the grade (ESA 2021a:Slide 44).

In the school survey, 2.5% of students reported repeating grades P5-P8 on average, while 1.4% reported repeating grades S1-S4. This is in line with overall findings for repeaters outlined above. The number of CT girls reporting that they had repeated one or more target grades (P5-S4) was not significantly different from the number of NCT girls reporting that they had repeated one or more target grades.

We found no evidence linking cash transfers to increased educational attainment.

In a review of the evidence around cash transfers in education, Bastagli et al. (2016) found no clear evidence linking higher amounts to increased educational outcomes. This is potentially due in part to the relatively weaker role played by cash compared to other factors (e.g. supply and quality of schooling) for such indicators.

For the second phase of GESS, we were given results for the CPE examination (P8) for 2021 only. The approach to identifying schools and school names used differed between MoGEI and programme data, meaning that only two-thirds of schools with CPE exam results were able to be matched (unambiguous match by name and county) to the SAMS dataset (n = 167).

After this, a simple linear regression was performed to correlate the percent of girls eligible to receive cash transfers in a school with Certificate for Primary Education (CPE) results for P8 for 2021. None of these relationships were statistically significant, suggesting that the percentage of girls receiving cash transfers in a school is not a good predictor of their exam results.

There are two potential explanations for this. The first is that the amount of cash transfers used on school supplies, is very small, and therefore would not create a measurable effect on attainment. The second is that the quality of instruction in South Sudan is poor and the second phase of GESS has done little to address this, meaning that even increasing enrolment and attendance, thereby increasing girls' contact hours in schools, would not necessarily result in increased attainment.

A review of the spending categories for cash transfers shows that only five items can be understood to have a potential causal link to increased educational attainment. These materials are exercise books, pens and pencils, textbooks, science/maths equipment, and reference books. It should be noted as well that the theory of change around attainment includes that students are exposed to quality instruction, an assumption that is problematic in South Sudan.

Although 37.5% of girls reported spending cash transfers on exercise books and 27.8% on pens/pencils, the amount spent on these five kinds of materials combined was 9.8%. This translates to an average of GBP 1 to GBP 3.50 of a student's CT spent on materials that could be causally linked to attainment.

4.6. EQ5: What wider impact/benefit do CTs have on families aside from the enrolment, attendance, retention, and educational attainment of girls?

4.6.1. Impact on girls' attitudes

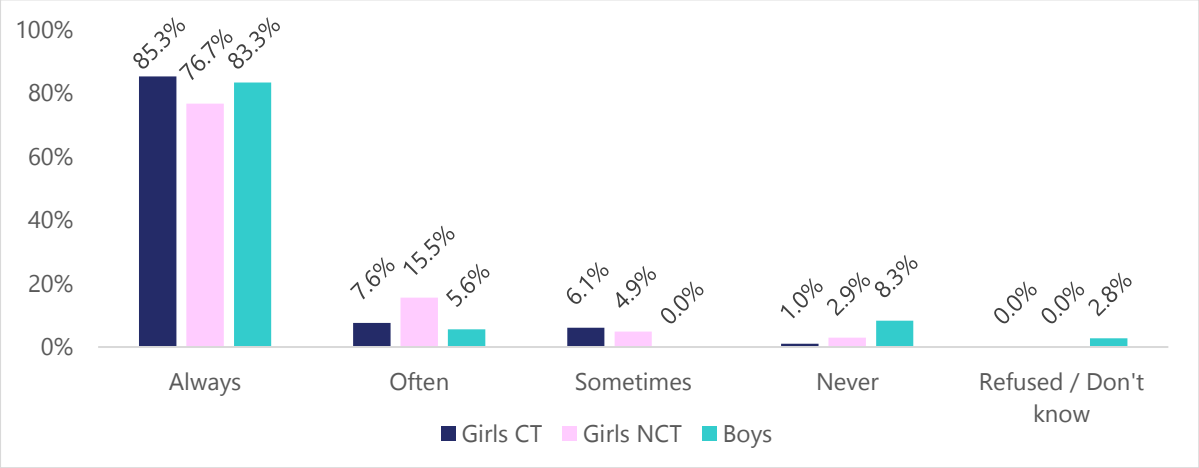
This research was also designed to identify the broader impact cash transfers could have. There is some evidence that girls who received cash transfers had more positive attitudes about equality of education and towards aspirations of education rather than marriage compared to NCT girls.

CT girls were significantly more likely to believe that girls and boys should be educated equally.

Respondents were asked about their beliefs about girls' education. As shown in Figure 14, CT girls were found to be significantly more likely than NCT girls to think that girls and boys should 'always' be educated equally, X^2 (4, N = 445) = 16.353, p = .003)[9]. 83% of boys also believed that girls and boys should 'always' educated equally.

Respondents were asked whether they thought sending girls to school was unsafe or dangerous. More than 80% of every group was found to believe that it is never unsafe to send girls to school.

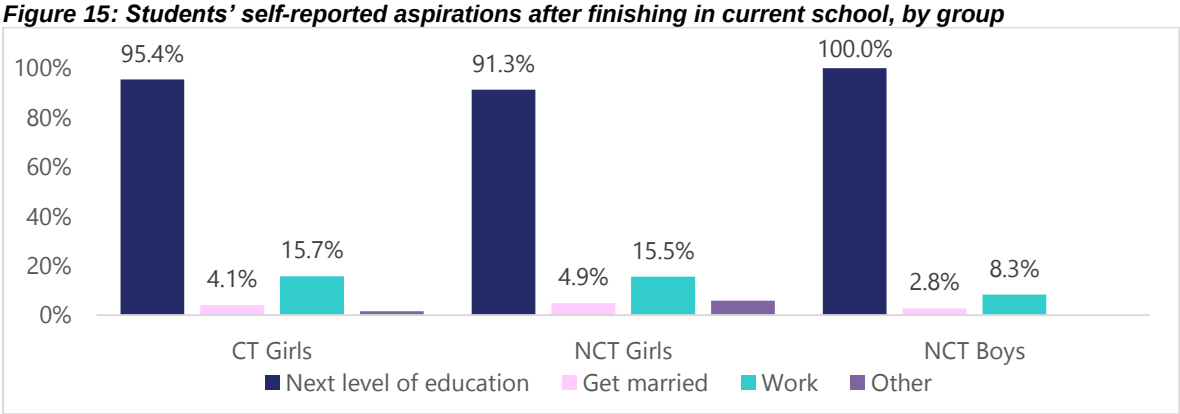
Figure 14: Attitudes towards whether girls and boys should be educated equally



Girls who received CTs were significantly less likely to plan on being married than NCT girls.

CT girls were significantly less likely to plan to be married at the end of their school, compared to the NCT girls (X^2 (1, n = 442) = 6.565, p = .010)[10]. Interestingly, 12.5% of CT girls in P5 reported that they were planning to be married by the end of the level they were studying, whereas only 5.5% of the P8 and none of the S2 CT girls did. This may imply that girls with more time receiving and benefiting from the CT are less likely to plan to get married instead of going to school than their younger peers.

Figure 15: Students' self-reported aspirations after finishing in current school, by group



When asked about what they hoped to achieve before ending their education, CT girls were not significantly more likely to report they hoped to complete secondary, postgraduate degree, or university than boys or their NCT classmates.

[9] The chi-square test for this question was run in the oversample dataset.
[10] The chi-square test for this question was run in the oversample dataset.

4.6.2. Impact on parental attitudes

The household survey was designed to capture wider benefits of cash transfers on girls and their households. The following are the results of analysing 28 in-depth interviews with households of students included in the school survey. The households were selected across three types or categories (see Methodology section) to facilitate comparisons between them, particularly between households receiving multiple cash transfers (Type I households), households with children with disabilities (Type II households) and households not receiving any cash transfers (Type III households).

Parents recognise the value of education but seem to have shifted from articulating past negative attitudes towards education to present negative consequences of not attending school for their children.

Parents and guardians were asked the same series of questions about the value of education in 2018 and 2022, and their responses were coded and analysed.

The GESS endline household report (2018) found that parents and guardians 'expressed positive attitudes towards school and education and recognise[d] the value of having educated children' (p.42). The GESS endline report noted that many parents mentioned that school was not valued in their communities when they were growing up, and that 'the fact that many guardians were able to articulate the negative attitudes towards education in the past alludes to a wider shift in attitudes towards education, and the gradual recognition of the value of education, even for girls' (p.43).

Qualitative evidence from households from the present household survey, conducted in November 2022, shows that parents' attitudes remain positive, however the method for expressing this seems to have shifted from 2018. Parents now responded in terms of the negative social consequences they face for not sending their children to school, such as being 'disrespected', 'discriminated' against, 'face shamed [lose face]', 'isolated' by the community, or even face legal consequences, if they did not send their children to school.

In 2022, parents were able to articulate how their children would be affected if they were not sent to school. Among the beliefs that were expressed by the respondents were that the 'child will burden the family', 'child's future will be affected or will be at risk', 'the child will remain uneducated, illiterate or having no skills for the workforce', 'the child will remain poor and will stay in poverty'. Several parents expressed concerns that the child will likely be involved in a gang, and not respected by the community. These responses show that the 'shift in attitudes towards education, and the gradual recognition of the value of education, even for girls' noted in the 2018 endline report has continued.

However, qualitative analysis of household responses did not isolate an effect of receiving cash transfers on attitudes towards education.

Cash transfers were not mentioned unprompted by any respondents as a reason for valuing girls' education and there was no discernible difference in attitudes towards education or girls' education between households benefitting from multiple cash transfers and households who had not benefitted from cash transfers.

One explanation for this is that more positive attitudes towards education and girls' education are not limited to the girls themselves but, through dialogue, have consequently affected other members of the household and the wider community. Parents were asked whom they talked to within the family for advice making decisions about their children's education. The most frequent response was family members other than the spouse, mentioned by 45% of respondents. Likewise, when asked if they spoke with anyone outside your family about education, parents most frequently mentioned other community members or neighbours, and respondents also mentioned they received information about education through community members and the Parent-Teacher Association (PTA), funerals and mosques. These channels of communication illustrate that households receiving cash transfers are not isolated from those without. The most frequent reason given for discussing education both inside and outside the family was to spread awareness of the benefit or importance of education for the future, mentioned by 68% of respondents in the context of the family and 43% of respondents for people outside the family.

Figure 16: Responses when asked 'Do you ever talk with anyone outside of your family about education?'

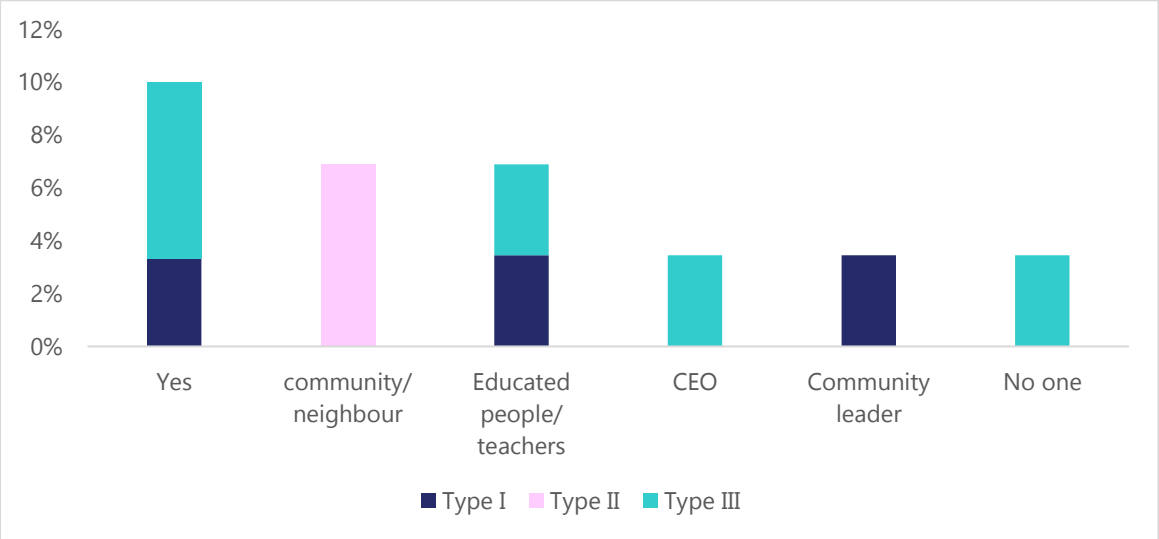
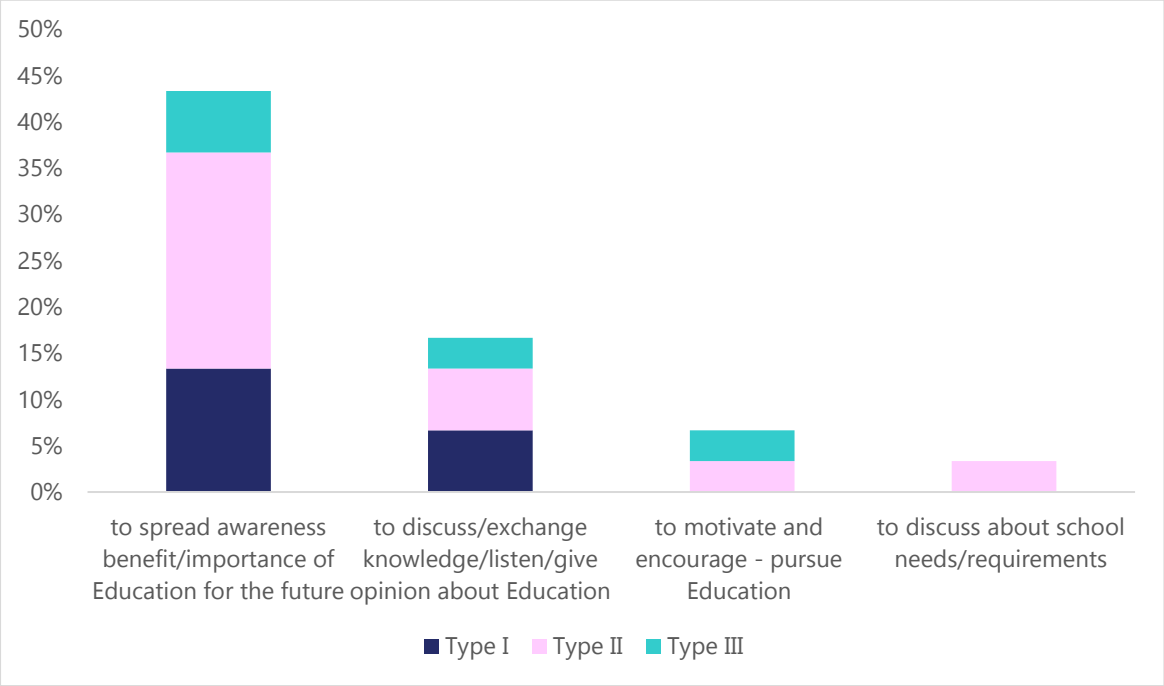


Figure 17: Reasons for discussing education with people outside the family



Another explanation is that the difference in attitudes was too small to be picked up by a qualitative survey of 55 responses, or that the effects were diminished at the household level. Evidence from the sections above, which identifies larger numbers of girls who did and did not receive cash transfers, illustrates statistically significant differences in girls' attitudes towards equality in education and pursuing education over marriage based on whether they received cash transfers. However, the differences were relatively small (0.8 to 4 percentage points) – the difference of one or two cases in the qualitative sample.

While most households say they would like to send all their children to school, the economic reality in South Sudan means that most households must prioritise some children over others.

The vast majority of parents want all their children to attend school. However, the costs associated with doing so are prohibitive for most households in South Sudan. The ESA calculated that the median household spent 52% of their non-food expenditure on educational expenses, rising to 78% for the poorest quintile of households (ESA Chapter 4:Slide 27). The authors calculated that the total cost of

sending a single child to primary school, including school fees, exam fees, and basic supplies, was USD 144 (GBP 110) or 20% of the GDP per capita in South Sudan, while the cost of sending a single student to secondary school was USD 268 (GBP 205) or 36% of GDP per capita. With an average of 4-6 children, most South Sudanese households therefore face 'impossible decisions…[about] which of their children they are financially capable to enrol…especially at the secondary level' (ESA 2021b:Slide 28).

The majority of parents said they would prioritise all children, without mention of gender.

The majority of household respondents (52%) in the 2022 household survey stated they would prioritise all children regardless of gender, and in fact gender was not mentioned at all as a reason for prioritising certain children. A typical response reads, 'all children are priority in the family' (*Female, 41, firewood collector Jonglei).* There may be an element of positive response bias here, with parents giving an idealised response, or response seen as socially desirable, despite it being impossible for most households in South Sudan to prioritise all children. However, this is still notably different to initial responses given in the GESS endline household survey (2018), which with a similar methodology found respondents gave a preference towards boys when asked which children should be prioritised.

Figure 18: Comparison of reasons given to prioritise children's education amongst respondents with multiple wives, GESS (2018) vs the second phase of GESS (2022)

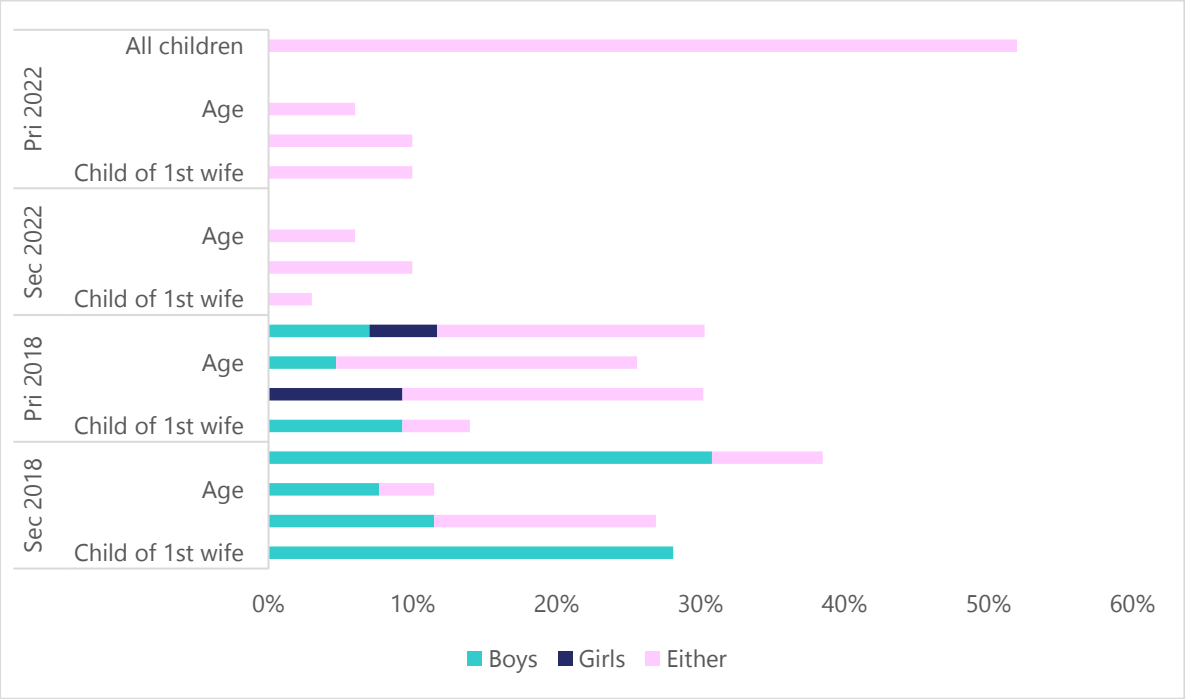


Figure 18 shows that at the end of the research period (2022), no respondent mentioned gender as the basis for prioritising children's education, compared to 30% of respondents for primary school and 38.5% of respondents in secondary school. Note as well that 30% of respondents expressed a preference for boys to attend secondary school at the end of the first phase of GESS. Comparison was made between respondents with multiple wives as this is how the data were presented in the endline household report (2018). These findings may indicate a shift in social attitudes, or in orientation towards a response seen as socially desirable.

With an out-of-school rate of 60%, and the economic analysis presented in the previous section, we understand that households in South Sudan are in reality forced to choose which children to educate. SAMS enrolment figures, which show 1.27 girls to every boy enrolled in primary and 1.01 girls to every boy in secondary, confirm that households have no apparent bias against girls in choosing which child to educate.

The rest said they would prioritise the eldest or the most intelligent child, regardless of gender.

The remaining respondents in the 2022 household survey indicated a preference for the eldest or most intelligent children, again with no reference to gender as the basis of preference. Some respondents reasoned that their eldest children would finish school faster, therefore will be able to find work faster to help support the family. They could also teach their younger siblings at home. For households with multiple wives, prioritising the children of the first wife can be seen as prioritising the eldest children, however there are additional cultural expectations around this. One respondent said, 'our culture forbid[s] recognition of second wife before fulfilling the needs of the first wife.' (*Male, 45, Farmer, Western Bahr-el-Ghazal*).

Parents who preferred to send the most intelligent child mentioned his or her higher chances of success.

Respondents expressed a clear preference for keeping children in school, and there were no clear differences in attitudes towards educating either girls or boys at 12 or 15.

In the household survey, guardians were presented with the following situation:

'Imagine a man in your Payam has a 12-year-old son who attends school full-time. He badly needs his son to work full-time but wants him to stay in school. What should the man do? Why?'

The question was then varied to ask what the man should do if he had a daughter instead of a son, and for a 15-year-old son and daughter which were perceived to be more of 'marriageable age'.

Analysis of responses showed that parents were in support of 'staying in school' regardless of their children's age and gender. This finding is similar to the Endline 2018 report that 'guardians and parents have an overall positive attitude toward education and appear to recognise the value of sending their children to school.

Table 12: Responses given to the situation of a 12-year-old child, by gender

	Response to 12-year-old son	Response to 12-year-old daughter
Stay in school	*Send the child to school (Male, 42, Farmer, Warrap)*	*I should engage my girl child to continually pursuing her studies to the extent that she will be whom she is (Male, 52, Farmer, Lakes)*
Casual work	*The man should advise his son to do casual work but rather spend much of his time on studies. Because if the son study and achieve his academic goal, he will be able to have more and better full-time job (Gender not recorded, 33, Farmer, Central Equatoria)*	*To keep her in the school because to study and then during holidays she will do some of domestic work. (Female, 36, Farmer, Lakes)*
Get outside help	*Get helper from outside (Female, 27, Trader, Eastern Equatoria)*	*Getting someone to work on her behalf (Female, 27, Trader, Eastern Equatoria)*

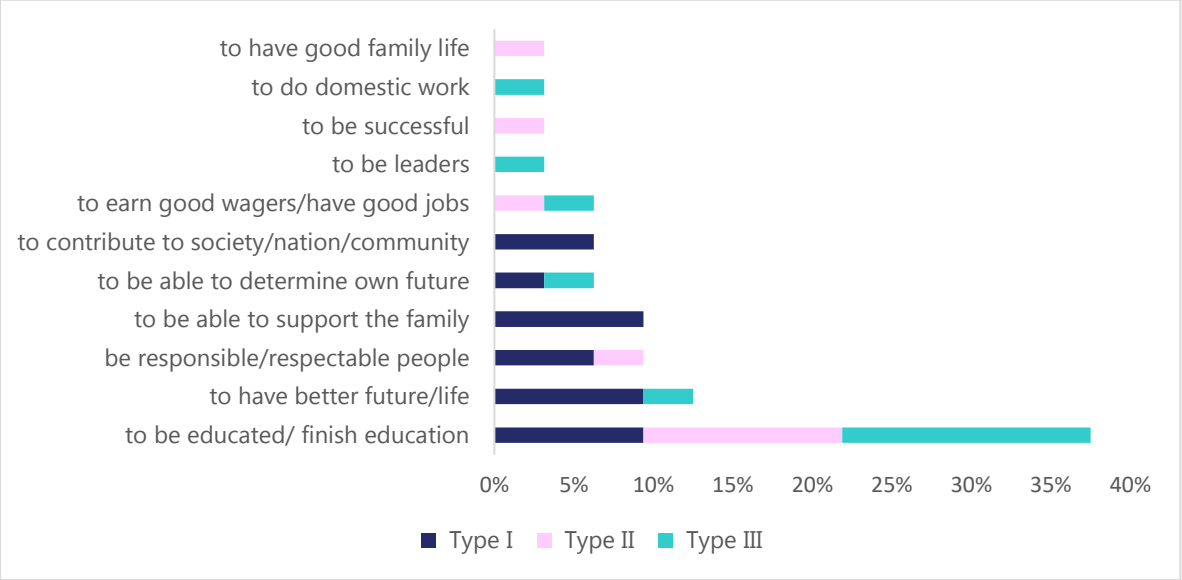
Table 13: Responses given to the situation of a 12-year-old child, by gender

	Response to 15-year-old son	Response to 15-year-old daughter
Stay in school	*The boy can remain at school to also finish his studies for future good life' (Female, 18, Farmer, Unity)*	*The daughter should only spend much time in the school (Male, 43, Farmer, Western Equatoria)*
Casual work	*'He should still focus on his casual work but rather spend much of his time on studies. Because he has a brighter future.' (Gender not recorded, 33, Farmer, Central Equatoria)*	*The daughter has to assist in the morning hours and in the evening hours and she has to have more time for her school studies' (Female, 36, Small shop owner, Central Equatoria)*
Get outside help	*Employ someone else (Male, 39, Civil Servant, Upper Nile State)*	*Employ someone else (Male, 28, Supported by family abroad, Upper Nile)*

Several respondents said that their responses to all the cases would be the same. For example, one respondent said, 'They are all children who are equally to be in school' *(Male, 66, Farmer, Eastern Equatoria*). No parent mentioned preparing their children for marriage in any of the scenarios.

Parents' most common aspiration for their children was for them to be educated, regardless of household type.

Figure 19: Guardians' aspirations for their children regardless of gender



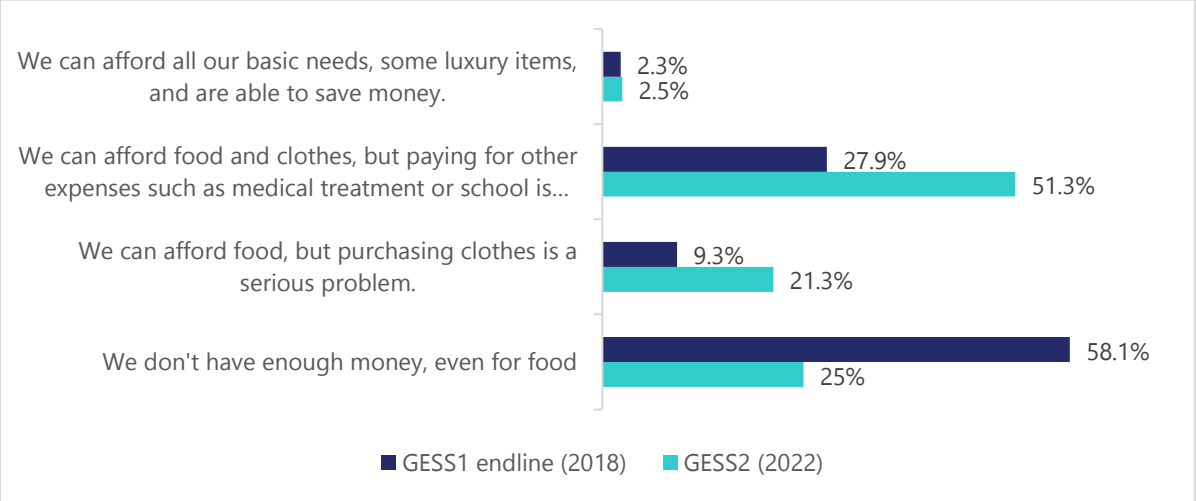
Parents were asked what they wanted their sons or daughters to do when they grow up. The most frequent response given was for their children to be educated or to complete their education (mentioned by 38% of parents). The next most frequent response was to have a better future or better life (13% of parents). There were no notable differences by gender nor between household types.

4.7. EQ6: How was the Cash Transfer Output of the GESS Programme affected by the COVID-19 outbreak related school closures?

The school and household surveys incorporated questions from the baseline, midline, and endline surveys from the first phase of GESS. We compared responses on these surveys with responses given before the COVID-19 pandemic to see the extent to which they changed. Note that household surveys were not sampled representatively so findings may not be generalisable as they are with the school survey.

A question on household finances was designed to assess the level of basic needs households could meet at the time of the survey, regardless of nominal cost increases or inflationary pressures. When asked to describe the current financial situation of their household, 25% of parents in the 2022 household survey reported they didn't have enough money for food, compared to 58.1% of households in 2018. Over half of households in 2022 (51.3%) mentioned they could afford food but purchasing clothes or other extra expenses are not affordable, compared to a quarter of households (27.9%) in 2018. Overall, using the Mann-Whitney test, these differences were statistically significant, (U = 1,133, p=.002)

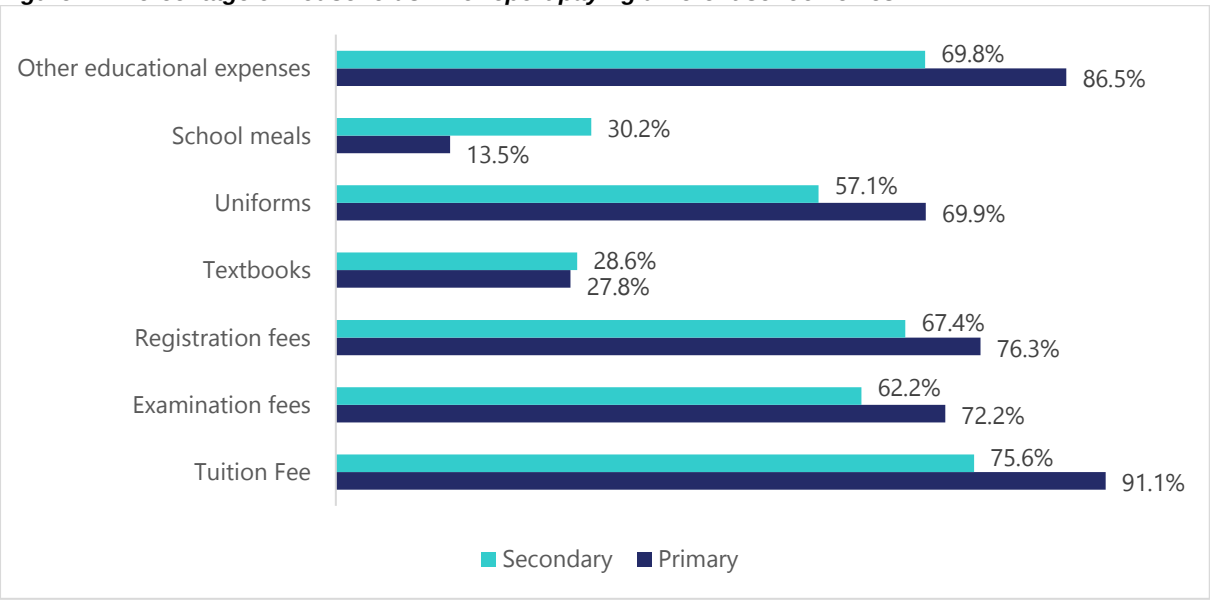
Figure 20: Comparison of household financial situation reported by parents, 2018 vs 2022



Parents report paying more levies than in 2018 and report that the overall cost of education has increased, but our analysis shows that in terms of purchasing power parity this may have decreased.

The four most common levies that guardians reported paying for, at both primary and secondary levels, were tuition fees, registration fees, examination fees, and uniforms. In addition, many households also indicated that there were other costs associated with sending a child to primary and secondary school that are beyond the categories outlined. Details are presented in Figure 21.

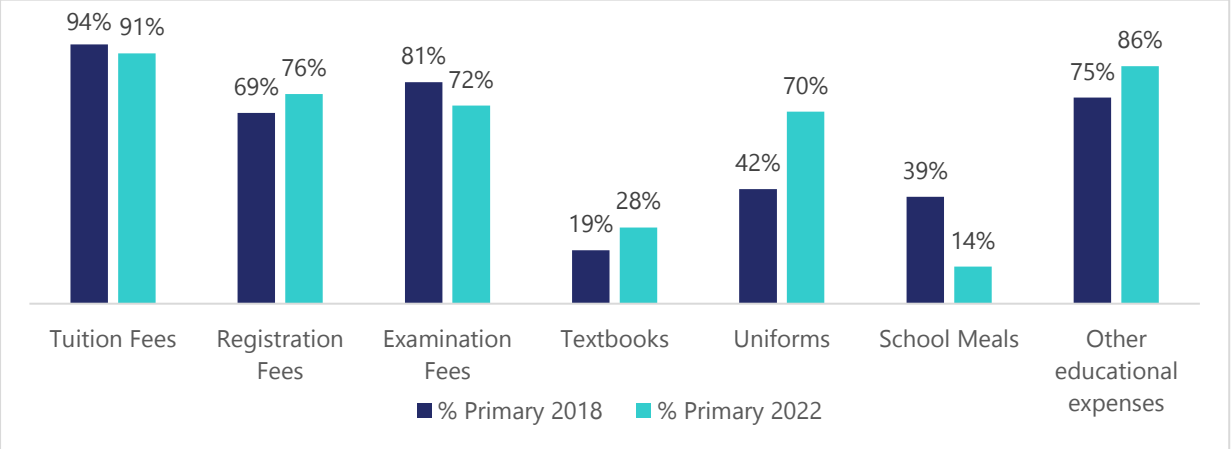
Figure 21: Percentage of households who report paying different school levies



As shown in

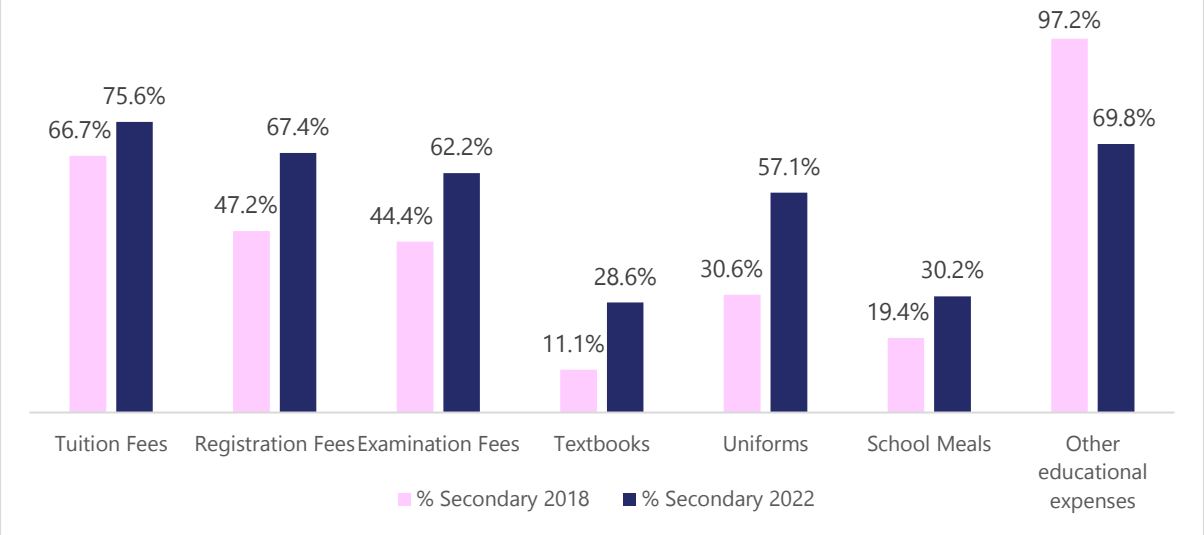
Figure 22, compared more households with children in primary school reported having to pay for registration fees, textbooks, uniforms, and educational expenses in 2022, compared to 2018. However, in 2022, fewer households reported having to pay for tuition fees, examination fees, and school meals than in 2018.

Figure 22: Percentage of households who report paying for different primary school levies, 2018 v. 2022



More households reported having to pay all categories of secondary school levies in 2022 compared to 2018, shown in Figure 27, including for tuition fees, registration fees, and examination fees, and differences between 2022 and 2018 were more pronounced than for primary school.

Figure* 23*: Percentage of households who report paying for different secondary school levies, 2018 v. 2022



These findings should be interpreted with some caution, as 2022 results were taken from a relatively small sample of households (*N* = 77) that was not designed to be representative, and fewer households answered questions on secondary school levies (*n* = 45). The statistical significance of the difference with 2018 data could not be determined because the endline survey from the first phase of GESS did not provide raw data or give numbers of respondents.

We did not have comparable data on household income and spending for this period but note that due to recent shocks due to COVID-19 and conflict, overall household income may have decreased over this period as well, meaning that households may not view a reduction in costs re-based into GBP as decreasing costs of education.

Guardians of primary school students reported a nominal cost increase of 3.2 times compared to the costs they reported in 2018, but an actual decrease of 20% when denominated in GBP.

When asked whether the costs for education were higher than before the pandemic, 63.6% of parents in the household survey said that the costs for education in 2022 are higher than two years ago. Parents reported costs for schooling in SSP in 2022 were more than three times higher than what was reported in 2018.

Causes were mainly attributed to the current economic climate:

'Well it is (because) of devaluation of our local currency.' (Male, 51, Farmer, Lakes State)

'It has increased because of instability, insecurity, bad roads and more taxation by the government.' (Male, 77, Shop owner/attendant, Western Bahr-el-Ghazal State)

'Increase in payment of school fees due to economic crises' (Female, 28, Trader, Eastern Equatoria)

'Yes, prices of items have gone higher, and I think COVID-19 is the one that caused this problem.' (Female, 30, Collector/agriculture, Western Equatoria)

However, when adjusting for the devaluation of the local currency, reported costs actually decreased by around 20% in GBP terms compared to what was reported in 2018. Table 14 shows a breakdown of the reported costs of essential primary school items/fees in 2018 and 2022 in both SSP and GBP.

Table 14: Costs of essential primary school items/fees as reported by parents, SSP vs GBP, 2018 vs 2022

Cost	Average SSP per school year - Endline (2018)	Average SSP per school year - the second phase of GESS (2022)	Nominal change in cost relative to 2018 (SSP)	Average GBP per school year- Endline (2018)	Average GBP per school year- (2022)	Actual change in cost relative to 2018 (GBP)
Tuition Fee	2,892	12,534	4.3x	15.7	17.0	1.1x
Examination Fees	442	2,546	5.8x	2.4	3.5	1.4x
School Meals	2,398	214	0.1x	13.1	0.3	0.02x
Registration Fees	2,525	2,757	1.1x	13.7	3.7	0.3x
Textbooks	180	322	1.8x	1.0	0.4	0.4x
Uniforms	1,250	4,297	3.4x	6.8	5.8	0.9x
Other educational expenses	25,748	92,232	3.6x	140.2	125.4	0.9x
Total cost per year	35,435	114,902	3.2x	192.9	156.3	0.8x

Parents of secondary school students reported a nominal cost increase of 2.2 times between 2018 and 2022, but an actual decrease of 20% when denominated in GBP.

Costs for secondary school girls are 1.5 times higher than for primary schools. In this regard, the annual cost of education according to guardians of students in secondary level was estimated in SSP and compared to an estimated cost of 2018. Guardians reported that the average reported costs in SSP in 2022 are 2.2 times higher than what was reported in 2018. Importantly, the average effective value cost resulted in a decrease compared to what was reported in 2018 due to the appreciation of the SSP against the GB pound from 2018 to 2022.

Table 15 shows a breakdown of the reported costs of essential secondary school items/fees in 2018 and 2022 in both SSP and GBP.

Table 15: Costs of essential secondary school items/fees as reported by parents, SSP vs GBP, 2018 vs 2022

Cost	Average SSP per school year- Endline (2018)	Average SSP per school year- the second phase of GESS (2022)	Nominal change in cost relative to 2018 (SSP)	Average GBP per school year- Endline (2018)	Average GBP per school year- (2022)	Actual change in cost relative to 2018 (GBP)
Tuition Fee	4,193	47,491	11.3x	22.8	64.6	2.8x
Examination Fees	641	2,961	4.6x	3.5	4.0	1.2x
School Meals	3,477	862	0.2x	18.9	1.2	0.1x
Registration Fees	3,661	3,657	1.0x	19.9	5.0	0.2x
Textbooks	261	2,081	8.0x	1.4	2.8	2.0x
Uniforms	1,813	6,613	3.6x	9.9	9.0	0.9x
Other educational expenses	37,335	50,410	1.4x	203.3	68.6	0.3x
Total cost per year	51,381	114,074	2.2x	279.7	155.1	0.6x

These estimates are in the middle of those given by the Education Sector Analysis (GBP 110 for primary and GBP 205 for secondary) and are not necessarily representative for households. However, along with the comparison of responses of self-reported household situation in

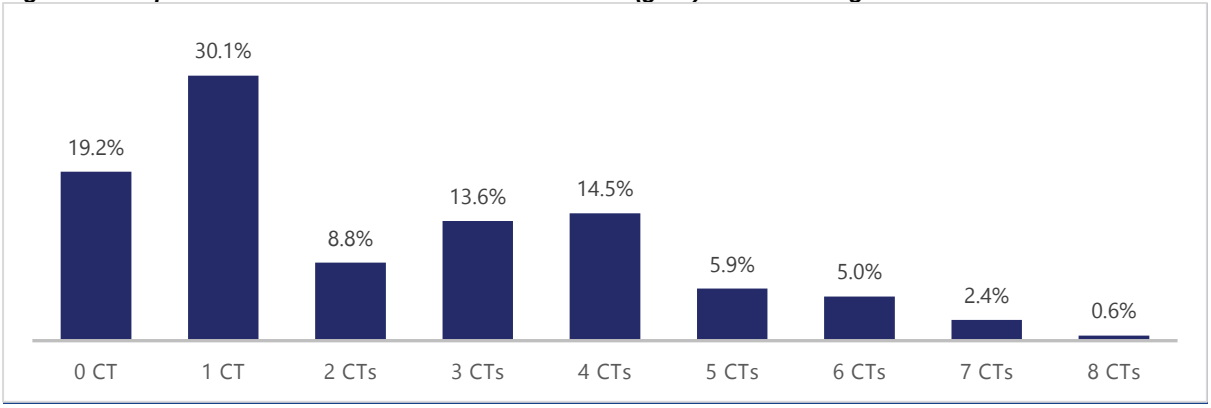
Figure *20*, these suggest that while the perception of costs and nominal costs may have risen, the actual burden of education costs may have eased for households since the first phase of GESS. The cost of primary school meals, in particular, was shown to have dropped significantly, likely because of the start of a large school feeding programme funded by the World Food Programme and USAID which started in 2022.

4.8. EQ7: Has the delivery of Cash Transfers been effective from the point of view of timeliness and transparency? What lessons can be learned from the delivery of cash transfers to inform future programming?

At the time of the research, nearly 900,000 unique girls had benefited from cash transfers in the second phase of GESS, and two-thirds of girls have benefitted from multiple cash transfers.

The number of girls benefited by the cash transfer programme has increased, and 887,694 unique girls had benefitted from cash transfers as of March 2022. Moreover, most girls have benefitted from multiple cash transfers. As shown in Figure 24, 31% of the girls surveyed mentioned having received only one cash transfer since they started going to school. This was likely during the 2020-21 academic year, when the programme suspended requirements for attendance due to school closures during the COVID-19 pandemic. The other two-thirds of girls reported receiving multiple cash transfers, with the most common number reported being four.

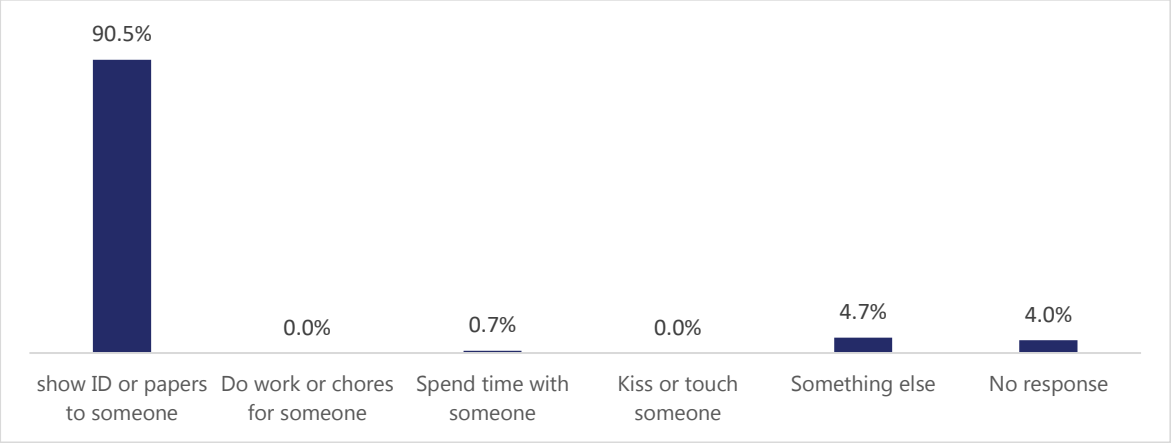
Figure 24: Reported number of cash transfers received (girls) since starting school



To get a cash transfer, girls were only asked to show their ID or papers.

Girls were asked if they had to do anything else to receive their last cash transfer. Almost all girls (90.5%) reported having to show their ID or papers to someone for them to get the cash transfer. No safeguarding issues, such as girls needing to do work, chores, or sexual favours for someone to secure the cash transfer were identified. In all cases, 'something else' referred to their need to attend class to get the cash transfer.

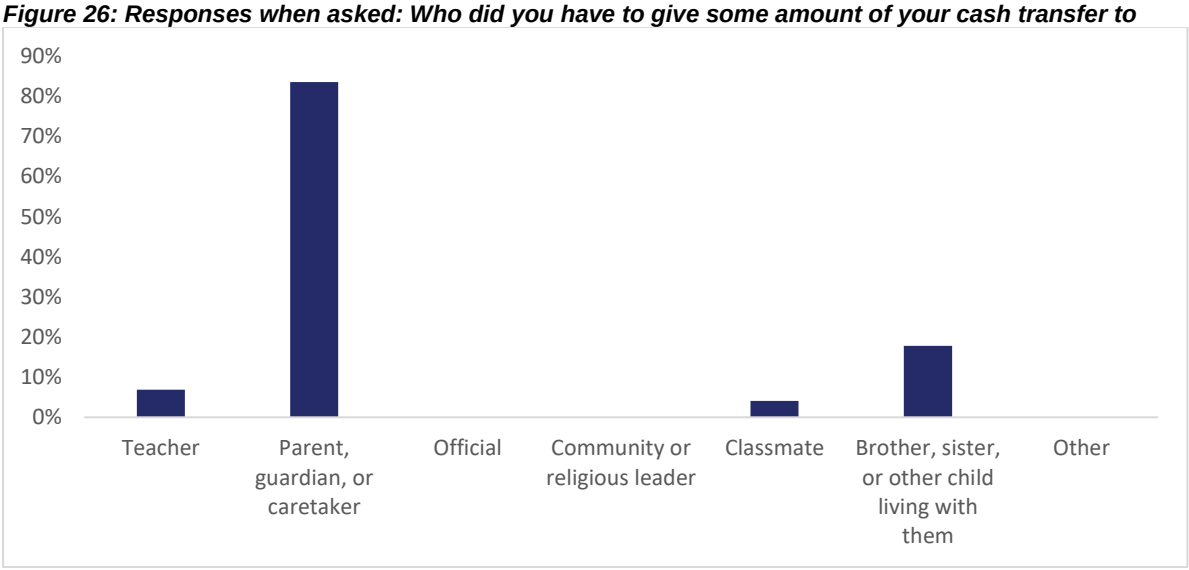
Figure 25: Responses to: Did you have to do anything to receive your last cash transfer?



Around a quarter of girls who received a cash transfer reported having to give an amount to someone.

Girls were asked if they had to give any amount of the cash transfer to someone else. Out of 275 girls who reported to have received a cash transfer, 26.5% of the girls responded they had to give an amount to someone, nearly always a family member.

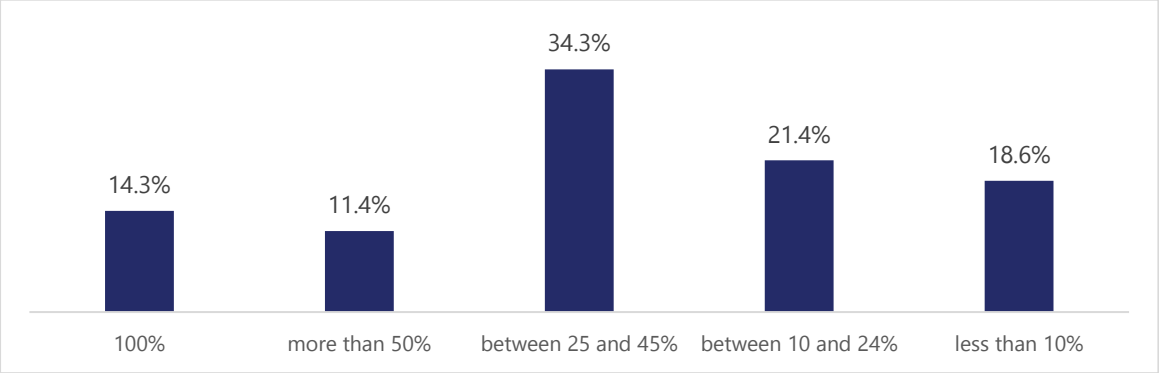
Figure 26: Responses when asked: Who did you have to give some amount of your cash transfer to



The programme team flagged that teachers should not have been receiving any part of the cash transfers. The affected schools were passed to the programme team and the issue was responded to and reported to FCDO.

In this regard, from the 26.5% of girls (N=73) who reported to have given part of their cash transfer to someone, 14.3% said they had to give 100% of it. The rest varied between 10% to 90% (Figure 27).

Figure 27: Responses to: How much of your cash transfer did you have to give?



5. Key Findings and Recommendations

5.1. Key findings

At the time of the research, the second phase of GESS has supported nearly 900,000 girls with cash transfers across South Sudan.

GESS has continued to support girls in South Sudan, with over £18.6m worth of cash transfers provided to 887,694 unique individuals as of March 2022. The onset of the COVID-19 pandemic meant that the programme suspended attendance requirements for cash transfers in 2020 and targeted all enrolled girls. As a result, nearly one-third of girls who reported receiving cash transfers in the school survey reported receiving only one cash transfer. 74% of girls reported keeping the entire amount of the cash transfer for themselves, whereas the rest mostly reported having to give a portion to their parent, sibling, or other family member.

Cash transfers remain an efficient means of supporting girls in school. Girls who reported receiving cash transfers did not report having to do work or chores, spend time with someone, or do sexual favours for someone to receive the cash transfer. 94% of girls reported control over deciding what to purchase with the cash transfer, with only 6% saying their family decided for them.

Unlike during the first phase of GESS, we did not find clear evidence linking girls' cash transfers with increased enrolment for the second phase of GESS.

According to the SAMS database, girls' enrolment has increased by 30% over the second phase of GESS implementation period. However, our research did not provide clear evidence linking cash transfers with increased girls' enrolment as Crawfurd (2016) found.[11] This may be in part because the second phase of the programme has saturated the target population, and in part because the conditions for conducting a 'natural experiment' between similar groups of girls, some of whom received cash transfers and others who did not, did not exist for the second phase of GESS. Because of this, our primary variable for analysing SAMS data was the percentage of enrolled girls who were eligible for cash transfers (See Section 4.2 above).

Crawfurd (2016) found that the number of cash transfers received by a school had a 'positive but insignificant' correlation with outcome variables of interest in his 2016 study (p.16). When we tried to replicate his approach, analysing the correlation of the number of girls in a school eligible for cash transfers as a percentage of female enrolment in the school, and controlling for type of school (government vs. non-government) and level (primary vs. secondary), we found a very small but statistically significant **negative** correlation. We found similar results with other models and approaches, including the number and percentage change in enrolment of boys and girls from the previous year, number and percentage change in enrolment in boys and girls from the baseline in 2017-18, number and percentage change in enrolment of boys and girls in the year after the cash transfer, and log transformations of the numerical changes.

The explanation for this negative correlation is not clear from the available data or analysis. One potential explanation is that schools and individuals that receive cash transfers are also more sensitive to costs around education, and the amount of cash transfers, especially in later programme years, may not have been sufficient to cover girls' needs or fully address causes of absence.

We found primary evidence that cash transfers were linked to increased girls' attendance.

Across the sample, 71% of students targeted were present and able to be found in schools. This compares well to the GESS endline survey (2018), which found 47% of girls who received CTs in 2017 were present for the fieldwork (GESS, 2018a:85).

[11] Our sister study on the impact of capitation grants in the GESS using a similar approach (Montrose, 2023) found a statistically significant positive correlation between the amount of capitation grant spent on infrastructure and increased enrolment, with a similar effect size as Crawfurd (2016), suggesting that our approaches were valid and replicable.

Girls receiving cash transfers were significantly less likely to report missing more than two days of school at a time than girls who had not received cash transfers, but both groups of girls still reported missing more school than boys.

With 57% of NCT girls reporting a longer absence, NCT girls were about 1.6 times more likely to report longer absences than CT girls (36%), who were in turn two and a half times more likely to report longer absences than boys (15%). We tested differences in the percentage of students reporting they missed school more than two days at a time by grade but did not find any statistically significant difference between grades.

We also found that CT girls were significantly less likely to be absent due to illness than NCT girls. 63% of CT girls who reported having missed school more than two days at a time said it was due to illness, disability, or injury, compared to 84% of NCT girls. This difference was statistically significant and suggests that girls who have not received cash transfers were about 1.3 times as likely to report a long absence due to illness compared to girls who have received cash transfers. This suggests that CT girls may be motivated to come to school despite an actual illness, or less likely to use illness as an excuse not to come to school on the day.

This said, girls who received cash transfers were still significantly more likely to say they had been absent for two or more days because of 'not enough money to buy shoes, clothes, or uniforms' than NCT girls. As detailed in the finding above, this suggests that girls receiving cash transfers may be more sensitive to costs around education and the amount of cash transfers, especially in later programme years, may not have been sufficient to cover girls' needs or fully address causes of absence.

Girls who recently received their cash transfer were not more likely to be absent than those who have been waiting for it for nearly a year.

Getonga et al. (2019) suggested that 'payment of CT at the start of the school year may weaken the CT's power to keep girls' attendance high throughout the year (girls may drop out after receiving the CT)' (p. 17). We did not find evidence to support this hypothesis.

There was no significant difference in attendance on the day for girls who reported receiving their cash transfer a few weeks or a few days before the survey, compared to those who reported receiving their cash transfer more than a few months or a year earlier. This suggests that most girls do not attend class significantly less or drop out once they have received their cash transfer for the year.

Girls receiving cash transfers were significantly more likely to report that they would continue attending school next year than either of the comparison groups.

99% of the girls who have received a cash transfer reported that they would continue to attend school next academic year, compared to 96% of NCT girls and 86% of boys (and note that this is a measure of retention, not attendance). Although there were no statistically significant differences between grades, P5 girls were less likely than other grades to report they would likely attend school the next year, consistent with dropout trends outlined earlier.

Note that this is a self-reported attitude towards the likelihood of a future behaviour and is susceptible to positive response bias. Secondary data on actual enrolment and attendance show a general downward trend in enrolment and retention. Given the lack of consistent I.Ds. across years in both SAMS and EMIS data, it was not possible to track individual students across multiple school years.

We found no evidence of cash transfer linked to increased educational attainment.

In a review of the evidence around cash transfers in education, Bastagli et al. (2016) found no clear evidence linking higher amounts to increased educational outcomes. This is potentially due in part to the relatively weaker role played by cash compared to other factors (e.g. supply and quality of schooling) for such indicators.

Girls who received cash transfers had more positive attitudes towards the equality of education and to continuing education versus getting married, compared to girls who did not receive them.

85% of CT girls responded that girls and boys should 'always' be educated equally, compared to 77% of NCT girls, and 95% of CT girls reported that they would like to proceed to the next level of education after finishing at their current school, compared to 91% of NCT girls. The percentage of girls reporting that they planned to be married by the end of the level they were studying dropped from 12.5% in P5 to 5.5% in P8 and 0% in S2. These differences were statistically significant across the groups.

We asked students whether they had ever listened to *Our School*, a radio programme run by the community mobilisation component of the GESS programme, and if so, how many times they reported listening *to Our School*. Listenership was not significantly associated with attitudes towards girls and boys being educated equally or girls planning to be married.

The majority of parents value education and say they would like to send all their children to school. When they have to choose, parents are no longer using a child's gender to prioritise which child is educated.

A majority of parents (52%) in the household survey (2022) stated they would prioritise all children regardless of gender, and in fact gender was not mentioned at all as a reason for prioritising certain children. There may be an element of positive response bias here, with parents giving an idealised response, or response seen as socially desirable, despite it being impossible for most households in South Sudan to prioritise all children. However, this is still notably different to initial responses given in the GESS endline household survey (2018), which with a similar methodology found respondents gave a preference towards boys when asked which children should be prioritised.

The remaining respondents in the 2022 household survey indicated a preference for the eldest or most intelligent children, again with no reference to gender as the basis of preference. Some respondents reasoned that their eldest children would finish school faster, therefore will be able to find work faster to help support the family. They could also teach their younger siblings at home. Parents who preferred to send the most intelligent child mentioned his or her higher chances of success.

Qualitative analysis of responses given by parents at the end of GESS (2018) and during the second phase of GESS (2022) show that parents now recognise the negative social consequences they face for not sending their children to school, and the negative consequences for the child's future. Responses were not noticeably different between households receiving cash transfers and those that did not. This may indicate spill-over of attitudes about education or that differences between groups were too small to be picked up in a small qualitative sample.

Even though parents report that educational costs have increased, the burden of education on households seems to have eased somewhat since the first phase of GESS.

We conducted a household survey of parents and guardians, which was small in size (N = 77) and not designed to be representative but may be indicative of overall trends. Two-thirds of parents reported that education expenses increased, and our analysis showed that nominally costs in SSP for primary schools increased by 3.2x and secondary schools increased by 2.2x from the GESS endline in 2018. However, further analysis showed that in terms of GBP actual costs for most levies may have decreased, easing the burden of education on households. The largest nominal increases in SSP, and only actual increases in GBP, were reported tuition and examination fees in both primary and secondary schools.

This analysis fits with an overall assessment of household finances. When asked to describe the current financial situation of their household, 25% of parents in the 2022 household survey reported they didn't have enough money for food, compared to 58.1% of households in 2018. Over half of households in 2022 (51.3%) mentioned they could afford food but purchasing clothes or other extra expenses are not affordable, compared to a quarter of households (27.9%) in 2018.

The study provides limited findings on students with disabilities.

The agreed study design targeted only students who were present on the day of the fieldwork and revealed an under-representation of students with disabilities. A study focussed on students with disabilities was proposed by programme partner Leonard Cheshire Disability in Year 3 but was not funded.

A representative sample of students present on the day of the fieldwork included 17.4% of students who self-identified as having a mild disability according to the Washington Group short form questionnaire, and 1.8% of students who self-identified as having a moderate or severe disability. Although there are no official statistics on disability in South Sudan, Rohwerder (2018) references a multi-stage random cluster design conducted in four Greater Bahr-el-Ghazal states which found that 13.4% of respondents reported a moderate or severe disability. Students with moderate or severe disabilities may therefore be significantly underrepresented in schools, with perhaps 85% out of school (see the Section on Disability above).

When conducting quantitative analysis, we did not find that students who reported having a mild disability was a useful analytical category, as there was no pattern of their responses being statistically significantly different than other students. The number of students reporting a moderate or severe disability (n = 7 in the representative sample) was too small to provide robust analysis.

We recommend that if the programme is interested in understanding continuing barriers to enrolment of students with moderate or severe disabilities, they use a household sampling approach in further research including the programme endline evaluation, perhaps using community snowball methods to identify likely households to make efficient use of enumerators' time. Leonard Cheshire has identified a list of students with disabilities enrolled in schools which could constitute part of the sampling frame, but a minority of students with moderate or severe disabilities seem to be enrolled in schools in the first place, necessitating a different sampling approach.

5.2. Recommendations

We recommend revisiting the amount given for future cash transfers, informed if possible, by primary research with households to better understand spending pressures and dynamics. If resources are still constrained, we recommend that the programme consider supporting fewer girls with adequate cash transfer amounts, to see if this promotes enrolment more effectively.

Bastagli et al. (2016) found that 'the amount of the cash transfer needs to be just the right amount to cover the beneficiary's basic needs. Our analysis suggests the GESS cash transfer amounts may not have been adequate to meet students' needs, especially in later programme years.

The GESS endline survey (2018) estimated a minimum of GBP 14 to cover basic materials costs in primary school and GBP 25 to cover these in secondary (Mott MacDonald, 2019). More recently, the Education Sector Analysis estimated the total cost per student in South Sudan at USD 144 (GBP 110) for primary and USD 268 (GBP 205) for secondary, with school supplies estimated at USD 76 (GBP 58) for primary and USD 99 (GBP 76) for secondary (ESA, 2022b:Slide 28). GESS cash transfers were worth GBP 10 - GBP 15 in 2021 and GBP 15-GBP 20 in 2022. This means that the amount of the cash transfer only met 35% of the cost of school supplies in its best years.

Girls reported spending two-thirds of the amount of CTs on personal items (shoes, school bags, uniforms, and sanitary pads), with nearly a quarter (23.8%) of their CT on shoes. Read against other responses – 95% of respondents walked to school, and that girls who received cash transfers were nearly twice as likely to say they had been absent for two or more days because of 'not enough money to buy shoes, clothes, or uniforms' than NCT girls – we can infer that at the time of the study the amount of the cash transfer may not have been enough to meet demonstrated need.

For future support we recommend denominating cash transfers in terms of USD or GBP.

Cash transfer amounts were denominated in SSP and were adjusted every year, however the variability of exchange rates between SSP and GBP meant that the value of the cash transfers and their purchasing power parity were not consistent from year to year, fluctuating by a factor of 2-3x over

programme implementation (see Table 1). The programme was also inconsistent with which grades received a higher cash transfer amount, and although this stabilised in November 2020, with P8 and S4 receiving higher amounts than other grades, the rationale for this however does not align with literature identifying higher costs to be met in secondary school.

We recommend strengthening the findings and addressing these gaps in this report through further studies.

The present study is limited in scope by its agreed evaluation questions and design approach and was not designed to provide detailed evidence on several broader topics which may be of interest to the programme. It was moreover intended to precede and inform a more comprehensive programme endline evaluation schedule for Year 5.

The present study was designed for the primary research data collection to 'piggyback' on State Anchors' deployment to schools to distribute cash transfers during the 2022 programme year. Because of limited time at each location, it was agreed that the sampling frame would be limited to students in school on the day, rather than travelling to households within the communities, and students with disabilities would not be oversampled.

A review of the secondary data has raised several questions which are beyond the scope of the present study, including that the SAMS database shows girls' enrolment has increased over the second phase of GESS, which cannot be fully explained by cash transfers and capitation grants. The programme endline evaluation can take a wider view of these questions and integrate other programme components to better understand purported increases in girls' enrolment. In particular, a marked increase in girls' enrolment over the second phase of GESS remains largely unexplained, and several partners have raised whether this could be attributed to community awareness.

We recommend using household-based research in the programme endline to understand how to address the needs of out-of-school children, including children with disabilities.

The findings of the study and analysis done in the SAMS and EMIS databases reflect a 'survivorship bias' which reflect data gathered from students who are still in school, schools that are still operating, and schools that are submitting data.

South Sudan has one of the worst primary and secondary enrolment rates in the world, with an estimated 60% of children in South Sudan still out of school (ESA, 2018a:Slide 55). This study estimates that perhaps 85% of children with moderate or severe disabilities are out of school. The endline evaluation could use an approach which includes household-based research so that the needs of out-of-school children, including children with disabilities, can better be met by future programming.

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