Girls' Empowerment in Rural Upper Egypt
A Comparative Study between Community and Government Schools

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Education can empower students. The student-centered, child-friendly, active-learning pedagogy of the Community Schools (CS) is supposed to transform students and empower them. In Egypt, over the years, non-governmental organizations and the Ministry of Education joined the CS movement while mainstream government primary schools (MPS) were built throughout the country. This study examines girls' empowerment in CS and MPS, defining empowerment via two domains, schoolgirls' participation in decision-making and their mobility. Utilizing quantitative data analysis of surveys collected from three Upper Egyptian villages, the results reveal that CS girls are older, poorer, and from less educated families than MPS girls. There are no significant differences in the empowerment levels between CS and MPS girls, except for public mobility. Indeed, girls in both types of schools largely share the attitudes of their parents and the wider community. The CS investigated are adaptive rather than transformative. Transformative change requires involvement of parents and the community.

Keywords: empowerment, girls, Egypt, community schools, primary education

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Introduction

Education holds out the promise of empowering girls, giving them not only academic knowledge and skills, but also the ability to make decisions that will change the course of their lives, and to act on those decisions (Kabeer, 2005; Kagesten et al., 2016; Murphy-Graham & Lloyd 2016; UNESCO, 2015). Alternative or complementary models of education, including the community/one-classroom/multigrade schools (henceforth referred to simply as community schools [CS]) like those developed in Egypt, have been said to be essential for achieving Education for All (EFA) (DeStefano et al., 2007). In Hoppers's (2005) typology, two of the categories of CS are (a) adaptive—schools that deliver essentially the same education as mainstream government primary schools (MPS), with perhaps some variation of curriculum and/or pedagogy; and (b) transformative—schools that empower students, giving them control of their lives, and changing their standing in society. CS that provide student-centered, child-friendly, active-learning pedagogy are said to transform students even though the students come from generally poor, disadvantaged families (Zaalouk, 2004). CS students are said not simply to learn to "read and write with fluency" and to be critical thinkers (DeStefano et al., 2007:9; Casely-Hayford & Hartwell, 2010), but to "exhibit high levels of self-esteem and confidence" (Farrell, 2008:11; Farrell & Hartwell, 2008). Zaalouk (2001) claims that young CS girls are able to convince their parents to delay marriage so they can continue their education. These young girls are said to be seen as role models by their peers (Casely-Hayford & Hartwell, 2010), and to be respected, independent actors and thought leaders, teaching their parents and communities about health, the environment, and other issues (Farrell & Hartwell, 2008; Zaalouk, 2004).

To successfully empower students, schools must engage the community; they must be a part of a larger discussion and movement (Harper et al., 2018; Hoppers, 2005). The contemporary CS program in Egypt, begun in 1992 with an agreement between the Ministry of Education (MoE) and UNICEF, was meant to be a part of a "coalition of movements" that promised "new norms and social meanings" (Zaalouk, 2004:27) for the students and the wider society. Soon, the Ministry of Education (MoE), international agencies, bilateral donors, and NGOs began new complementary models of education using variations of the CS methodology (Coster, 2006; MoE, 2000; 2007; NCERD, 2004; Sultana, 2008), and also promising transformative education for young children (CARE, n.d.;

Zaalouk, 2018). By 2014 there were more than 5,000 CS throughout the country (NCERD, 2014).

As CS were spreading throughout Egypt, MPS were also being built (Fergany, 2000; Iqbal & Riad, 2004; NCERD, 1999). By the beginning of this century, virtually every village in Egypt had a primary school; access to education was no longer a constraint, even in some of the communities served by the original UNICEF CS (World Bank, 2002; Szucs & Hassan-Wassef, 2010). School construction continues under the current government (Anonymous, 2018). With this growth, the broader educational environment changed.

The most recent published research on the effects of CS on empowerment and attitudes of their students took place around the turn of the century in rural Upper Egypt (Zaalouk, 2004), an area characterized by relatively low educational attainment and a traditional religious culture that holds on to established habits and customs (Langsten, Abdelkhalek & Hassan, 2022, Sieverding & Elbadawy, 2016). For example, the most recent Demographic and Health Survey (Ministry of Health and Population, 2015) found that educational levels were lowest in rural Upper Egypt, with 41% of women unable to read. Moreover, gender disparities in education are the greatest in rural Upper Egypt. Child labor is most common there. Women in rural Upper Egypt tend to marry young and have high fertility, while mortality in rural Upper Egypt is the highest at all ages compared to all other regions of Egypt. Women in rural Upper Egypt are much more likely than women from other regions to cite the inability to go places alone as an obstacle to accessing medical care. Despite the prohibition of female circumcision since 2007 (PRB, 2007), 88% of females 15–19 years of age in rural Upper Egypt have undergone the procedure. Married women in rural Upper Egypt are the least likely to participate with their husbands in decision-making, and the mostly likely to suffer from spousal violence.[1]

In a recent review Marcus and Page note that it "would be helpful" to compare empowerment in "typical government schools" with "atypical settings" (2016, p. 69). We respond to this concern comparing indicators of empowerment of girls in MPS and CS in three Upper-Egyptian villages.

Evolution of Primary Education in Egypt: 1990–Present

The UNICEF CS program serving three governorates (provinces) in Upper Egypt, began in 1992. Before starting, UNICEF staff visited communities, developed relationships with village residents, and determined where to place the initial CS. The overarching goal was to provide an

educational opportunity for children, primarily poor, primarily girls, who would not otherwise be able to attend school. This included children who not only lived more than two kilometers from an MPS, but also children who had failed to enroll in school before the maximum statutory age for beginning primary education, or who had started primary education, but had left school, and now wanted to return (Hussein, 2016; Zaalouk, 2004).

From the beginning, CS followed standard MoE textbooks. These materials were said to be taught creatively by the instructors (facilitators) to produce the active-learning pedagogy central to the success of the CS. Other features, such as a flexible schedule to accommodate agricultural or other common work in the villages; an emphasis on art; peer instruction; and an hour each day of physical education were to be part of the unique CS approach. The CS program was meant to eliminate the need for CS students to take private tutoring (Zaalouk, 2004).

The UNICEF CS program was to be a seedbed, providing a model that other CS could adopt (Zaalouk, 2004). Based on the success of the first four CS during their first year of operation, in 1993 the MoE began the One Classroom Initiative (MoE, 2007; 2008). USAID's New Schools Project supported CARE International's establishment of 189 multigrade schools (MGS) between 2000 and 2008 (CID, 2008). Following that, in 2003, the National Council on Childhood and Motherhood built "girl-friendly" CS and sought to mainstream the best practices of the CS (Sultana, 2008). Finally, in 2010, Misr El Kheir (MEK), an NGO, became involved in managing CS, first by taking control of some of the UNICEF CS. By 2016, working with local NGOs, MEK was supervising almost 900 CS (Hussein, 2016). In 2008 and subsequent years, most CS, other than those administered by MEK were turned over to MoE control (Szucs & Hassan-Wassef, 2010).

Parallel to the increasing number of CS, the government was constructing MPS in villages throughout the country. Over approximately 30 years, beginning in the 1980s, more than 30,000 schools/classrooms were built (Langsten & Hassan, 2018). In 2014, plans were announced for an additional 20,000 schools (Sobhy, 2014). As early as 2002, 99% of all Egyptian villages had an MPS (World Bank, 2002). As a consequence of this spread of schools and the dominance of the MoE, the CS educational environment changed. Specifically, CS are now frequently located close to or even within MPS buildings (Badr, 2015; Langsten, 2016). Most students join the CS at, or close to, the statutory enrollment age of 6 years and progress normally through 6 years of primary education (Langsten, 2016).

Such students are eligible to attend an MPS, if they choose. Moreover, the school schedule of many CS is no longer flexible, and daily physical education classes have largely disappeared. Community participation is often superficial or lacking altogether. Facilitators are often not qualified to teach Arabic, math, science, and other core subjects (Hussein, 2016). Private tutoring for CS students has not disappeared.[2]

With increased access to schools, educational attainment improved for all Egyptian children. In 1992, just 76% of all children completed primary school, and girls were significantly less likely than boys to achieve that goal. Girls from poor families, especially those in rural Upper Egypt, were the most disadvantaged, and experienced the greatest gender gaps in primary completion.[3] By 2014, girls in all regions, from families both wealthy and poor, had eliminated the gender gap in primary education (Langsten & Hassan, 2018). Thus, when it began, the UNICEF CS program was necessary to serve a disadvantaged population. Now, although some children remain out of school (Langsten, 2016; MoE, 2008; UNESCO, 2003), in 2014, even among children from poor, rural Upper Egyptian families, 95% of girls 14–15 years of age had ever enrolled in primary school, and 87% of those girls had completed that level (Langsten & Hassan, 2018).

This change in access and primary completion has important implications for our study of empowerment of girls. In 1992, only 83% of all females, and just 48% of females from poor, rural Upper Egyptian families had ever enrolled in school. Previous research compared the "reconstructed selves" of CS students (Zaalouk, 2004:115) with their lack of empowerment before entering the community school. At the time, this was reasonable. Now, however, when 97% of all Egyptian girls enroll in primary, and when virtually all girls at least have access to education, it is more appropriate to compare the empowerment of girls in the CS with that of MPS girls. The educational environment of the MPS is viewed as not suitable for a transformative pedagogy, while the CS are credited with empowering their students (DeStefano et al., 2007; Sultana, 2008; Zaalouk, 2018). If this is the case, then CS girls should be empowered not only relative to out-of-school girls, but also relative to their peers in MPS.

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This study examines girls' empowerment in rural Upper Egypt. Following Kabeer (1999), we focus on two domains of girls' empowerment: (a) girls' participation in decision-making; and (b) girls' ability to go to places

alone (mobility). The research investigates (a) the extent to which girls' empowerment differs by type of school attended; (b) the degree that each girl's thinking reflects that of her parent; (c) the level of agreement and the nature of disagreement (similarity index) between girls and their parents; (d) the difference in these similarity indices by school type attended.

Procedure

Quantitative data were collected in three Upper Egyptian villages. We used three questionnaires: (a) a household questionnaire to provide background information for all the participating families; (b) a girl questionnaire to measure her sense of empowerment; and (c) a parent questionnaire to record the degree to which they think their daughters should be empowered. All questionnaires were structured with closed questions. Both girls' and parents' questionnaires contained similar item-based assessment blocks of questions. Each block concerns a specific empowerment domain.

Participants

This study focuses on girls 8–15 years of age enrolled in the CARE MGS. The data for these girls were supplemented by data for age-matched female students from other CS in the studied villages, and by similarly matched female students from MPS. Preliminary research showed that the students of the CARE MGS and other CS were similar in terms of family background, educational attainment, and other characteristics, and also in terms of their level of empowerment. Therefore, for this work, the MGS and other CS students have been grouped together and jointly termed CS. Of the total sample of 490 girls, 316 (64%) are from CS, while 174 (36%) are from MPS. By the time of this research the CS studied had been under MoE administration for at least 4 years. Further, one parent of 88% of the girls was interviewed. Most of the parents interviewed were mothers; only 22% were fathers.

data Analysis

We use descriptive statistics to profile girls who attend CS and MPS. Then, multivariate factor analysis (FA) is used to derive the factors of each empowerment domain. These factors are comprised of the item-based assessment questions (observable variables) that are measured directly.

In our analysis, we obtained the actual values of each factor by summing the raw responses for the sub-group of questions that comprise that factor. Accordingly, the factors we use in the analysis are the aggregated sum of the responses of the observable variables. In the following, we will describe the construction of these factors.

Consider the decision-making domain. This consists of six item-based assessment questions asking about pivotal issues affecting the girls and their futures[4]. For each issue, we ask whether girls are solely responsible for making decisions, participate with their parents in making a decision, or must accept whatever decision their parents make. FA yields three factors: (a) schooling, (b) marriage, and (c) friends and spare time. Each factor is the sum of the recoded values of the responses to the corresponding questions. These questions are coded as follows: *1*, if a particular decision is solely the responsibility of the girl; *0*, if the parents have sole responsibility for a decision; and *0.5*, if both the girl and her parents jointly play a role in making the decision. Each factor is the sum of exactly two questions. The factor values range from 0 to 2 in steps of 0.5.

Similarly, FA of the mobility domain yields two factors: (a) public places including the market, field, and canal; and (b) private places including the homes of relatives and those of friends. The responses to all five item-based assessment questions are dichotomous[5]: if the girl can go alone to a place, she is given a code of 1; otherwise, 0. Summing the places where each girl could go alone yields a *public places* factor ranging from 0 to 3, and a *private places* factor ranging from 0 to 2.

To examine the first research question—does girls' empowerment differ by type of school attended—the non-parametric Mann-Whitney U test is used. This test examines whether the mean of the summed ranks differs significantly for the girls of the CS relative to those of the MPS. The remaining analyses use contingency tables and the chi-squared test of independence. To assess the degree to which primary school education in these traditional rural villages affects girls' empowerment in general, we investigate the degree to which each girl's thinking reflects that of her interviewed parent. That is, for the two empowerment domains (asked of both girls and their parents), we examine the level of agreement and the nature of disagreement between girls and their parents. Finally, we created a similarity index to summarize the agreement and disagreement and used the chi-squared test to determine whether these indices differ significantly by school type.

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Table 1 shows the profiles of girls in the CS and MPS. Specifically, it indicates that the distribution of the context variables (age, wealth quintiles, and parental education) for CS and MPS differ significantly.

To illustrate, CS students tend to be slightly older than the MPS students: only 9% of girls in MPS are aged between 12 and 15 years, while fully a quarter of girls in CS are within this age range. This reflects the CS role of absorbing children who either dropped out of education at early stages and returned later, or who did not join school in the first year or two of eligibility for starting education. Girls who attend CS come from poorer families. Almost 54% of the families of CS girls are from the two poorest quintiles,[6] while just 8% are from the wealthiest quintile. In contrast, the families of more than 16% of the MPS girls are from the wealthiest quintile with just 35% from the two poorest quintiles. Similarly, the parents of children in the mainstream schools have more education than do the parents of CS students: 72% of CS girls' parents never went to school compared with about 50% of MPS girls' parents; almost 25% of MPS girls' parents have at least preparatory (middle) school education, but only 4% of the CS girls' parents have reached this level.

Table 1. Girls' Profiles by School Type

	CS	MPS	N
Girl Age[a]			
8-9	36.4	42.0	187
10-11	38.3	49.4	206
12-15	25.2	8.6	94
Wealth Quintiles			
Poorest	26.7	12.3	105
Poor	27.0	22.8	124
Middle	22.5	21.6	108
Rich	15.9	26.9	96
Richest	7.9	16.4	53
Parental Education			
Never Been to School	72.1	50.3	277
Some Primary	23.8	25.1	106
Preparatory and Higher	4.2	24.6	53
N	316	174	490

Note. [a]Statistically significant at P <0.001 level.

Our primary goal is to test the assertion that CS education leads to more empowered girls. Table 2 shows the average rank of the empowerment level of schoolgirls.[7] For the decision-making domain, there is little disparity between the CS and MPS girls. The average rank of MPS girls exceeds that of CS girls by only one-point in the schooling factor and by just 11 points in the choice-of-friends factor. On the other hand, the average rank of the CS girls is higher than the MPS girls by only 12 points in the marriage factor. None of these differences is statistically significant. However, CS girls do have a significantly higher average rank in the public mobility factor than do MPS girls (257.96 and 218.20, respectively). This indicates that CS girls have greater freedom to go to public places alone. Finally, their average rank to go to private places alone is just 7 points higher than MPS girls. This difference is not statistically significant. In sum, there are mostly small differences between schoolgirls regarding the empowerment factors. Except in the case of public mobility, these differences are not statistically significant. As mentioned, public places mobility includes going to the market, field, and canal. CS girls come from relatively poorer families than MPS girls. Therefore, it is possible that CS girls have significantly more freedom to go to public places in order to do family chores or work. Thus, this mobility may result from family economic pressures rather than from being empowered.

Table 2. Mann–Whitney Mean Rank Test of Empowerment Domains by School Type

Empowerment	CS	MPS
Decision-Making		
Schooling	238.0	239.4
Marriage	217.8	205.6
Friends and Spare Time	234.6	245.7
Mobility		
Public Places***	257.9	218.2
Private Places	247.3	240.9
N	316	171

Note. Significance level: *** (P <.001).

Even primary education, in whatever kind of school, should empower girls; and though these villages are located in a relatively disadvantaged traditional region, the CS style of education is said to empower girls from such backgrounds, allowing them to make decisions about their lives (Zaalouk, 2004). Hence, our second research question arises: do schoolgirls develop

beliefs that are independent of the views of their parents and the wider community? Or do they reproduce the generally traditional beliefs of the surrounding environment? To answer this question, we test the level of agreement between girl/parent dyads on these issues (see Tables 3 and 4).

In these tables, each panel presents a factor of the empowerment domains as a square matrix. Rows represent the parents' responses; columns are the girls' responses. We use "table percentages" that is, the number of cases in each cell divided by the total number of cases in the table. There are two main points. First, the diagonal: this measures the degree to which parents and girls agree about the girls' behavior; and also indicates the nature of the agreement. In some cases, parents and girls agree on a relatively liberal view of an issue; in other cases, there is agreement on a conservative/restrictive[8] view of the girl's life. Second, the off-diagonal cells: these show the extent to which parents and their daughters disagree. The cells above the diagonal indicate that girls have more liberal/open perspectives than do their parents. For example, a girl may say that she alone can make the decision about her marriage, while her parents think that such decisions are solely up to them. The cells below the diagonal show that the parents' views are more liberal/open than those of their daughters. In such cases the parents say they would allow girls a larger role in making decisions than girls think they are allowed. We can then compute the net difference between the sum of the percentages in the cells above the diagonal and the sum of the percentages in the cells below the diagonal. This suggests the nature and extent of the disagreement between girls and their parents: (a) a positive net difference suggests that on balance girls have more liberal or open views than their parents; (b) a negative difference indicates that parents are more liberal than the girls recognize; (c) a zero difference shows that the level of disagreement between girls and their parents is balanced.[9]

To better understand, consider the three panels of the decision-making domain: (a) schooling, (b) marriage, and (c) friends and spare time (see Table 3). Each factor ranges between 0 and 2, in one-half point steps. Code *one* reflects one of two scenarios: either (a) the girl and her parents are responsible for making both decisions together, or (b) for one of the two decisions the responsibility is solely up to the girl, while the other decision is solely up to the parents. Parent/girl dyads show moderate levels of agreement (between 40 and 50%) for all three decision-making factors. When considering the nature of the agreement, we see that in each panel there are two modal values on the diagonal. Focusing first on the primary

mode (the largest value), in the cases of decisions about schooling and marriage, parents and girls mainly agree on a conservative position that parents alone should make the decision (24.3% and 21.8%, respectively). However, in the case of choosing friends and ways of spending spare time dyads generally agree on a more liberal view: girls alone can make these decisions (with a primary mode of 32.4%). For all three decisions, the secondary mode on the diagonal, which ranges between 10% and 17%, indicates the girl plays some role. The majority of dyads disagree on the degree to which girls should participate in making decisions. Specifically, for the two crucial decisions (schooling and marriage), the negative differences between the above-below diagonal sums indicate that parents would give their daughters slightly more scope for participation than the girls themselves perceive, though the degree to which parents are more liberal is small in both cases. For instance, parents are more willing (by a negative net difference of 5.7 percentage points[10]) to give their daughters a greater role to decide about schooling than the girls believe they have. Likewise, for marriage decisions, a negative 12.7 percentage point difference between the upper- and lower-off diagonal cells indicates parents are more likely to give their daughters a greater say in making marriage decisions than girls expect. The disagreement between girls and their parents in the case of Panel III is almost balanced with less than a single percentage point difference.

Table 3. Contingency Table of Agreement Between Girls and Their Parents—Decision-Making Factors

Parents/Girl	Parent Only	.5	1	1.5	Girl Only	N		
	Panel I: Schooling***						Sum	%
Parent Only	24.3	6.4	6.9	1.2	3.6	178	Diagonal[a]	42.4
.5	5.5	3.8	3.1	0.5	0.7	57	Above	26.0
1	9.1	1.7	10.5	1.0	2.1	102	Diag. (A)	
1.5	1.2	1.2	1.9	0.5	0.5	22	Below	31.7
Girl Only	5.3	1.2	3.6	1.0	3.3	60	Diag.(B)	
N	190	60	109	17	43	419	Difference (A-B)	-5.7

(*Continued*)

Table 3. Continued

	Panel II: Marriage ***						Sum	%
Parent Only	21.8	2.0	7.5	.6	0.0	114	Diagonal	44.1
.5	9.5	4.7	5.9	.6	1.1	78	Above	21.7
1	12.6	3.6	16.8	1.4	2.0	130	Diag. (A)	
1.5	1.4	1.4	1.4	0.0	0.6	17	Below	34.4
Girl Only	2.0	0.3	2.2	0.0	0.8	19	Diag.(B)	
N	169	43	121	9	16	358	Difference	-12.7
							(A-B)	
	Panel III: Friends and Spare Time***						Sum	%
Parent Only	1.5	0.7	0.7	0.0	2.7	23	Diagonal	47.0
.5	0.7	0.2	1.2	0.0	1.9	17	Above	26.1
1	2.2	1.2	10.7	1.9	10.2	108	Diag. (A)	
1.5	0.7	0.5	2.9	2.2	6.8	54	Below	26.8
Girl Only	2.4	0.5	10.4	5.3	32.4	211	Diag.(B)	
N	31	13	107	39	223	413	Difference	-.7
							(A-B)	

Significance level: *** (P <0.001).

[a.] There is no direct line-by-line association between the grid to the left of the vertical dark line and the "Sum" and "%" columns to the right of the vertical dark line. That is: there is no direct, line-by-line association between the "Parent Only" line in the grid and the "Diagonal" in the "Sum" column, nor is there any direct line-by-line association between any of the other lines in the grid on the left of the table and the information on the right of the vertical dark line. As explained in the text, the "Diagonal" % on the right is the sum of the percentages on the diagonal of the grid on the left. The "Above Diag (A)" on the right is the sum of the percentages above the diagonal in the grid on the left. And so on.

Table 4 presents the mobility factors. In the case of public places, 63.4% of all girl/parent dyads are in agreement on the number of public places girls can visit on their own, with the modal value (45.2% of all dyads) agreeing that girls are not permitted to go to any of the public places alone, with another 13.3% of all the dyads agreeing that girls may go alone to just one of the public places. Hence, most girls and their parents agree on a conservative/restrictive view of girls' mobility to public places. To the extent that girls and their parents disagree, on average girls believe they can go to slightly more public places than their parents say they allow. This is shown by the 8.4 percentage point positive net difference in the level of disagreement between girls and their parents. In sum, although attitudes about girls' mobility to public places are generally in agreement and conservative, to the extent that girls disagree with their parents, the girls' views are slightly more liberal than those of their parents. Panel II

displays parent/girl agreement about private places mobility. There are a number of similarities between this panel and Panel I, and one important difference. The overall level of agreement is almost exactly the same (63.6% versus 63.4% for private and public places, respectively), and the net disagreement is again small (just 3.7 percentage points). But, in the case of Panel II, most parent/daughter agreement allows girls to go alone to both friends' and relatives' homes, a comparatively liberal perspective.

Table 4. Contingency Table of Agreement Between Girls and Their Parents—Mobility Factors

Parent/Girl	**0**	**1**	**2**	**3**	**N**		
	Panel I: Public Places ***					Sum	%
0	45.2	12.1	4.2	0.9	268	Diagonal[a]	63.4
1	6.1	13.3	3.5	0.9	102	Above Diag. (A)	22.5
2	1.9	2.8	3.5	0.9	39	Below Diag.(B)	14.1
3	1.2	0.7	1.4	1.4	20	Difference (A-B)	8.4
N	233	124	54	18	429		
	Panel II: Private Places ***					Sum	%
0	7.4	4.6	5.8	--	77	Diagonal	63.6
1	2.1	7.2	9.7	--	82	Above Diag. (A)	20.1
2	4.4	9.9	49.0	--	274	Below Diag.(B)	16.4
	-	-	-	-	-	Difference (A-B)	3.7
N	60	94	279	--	433		

Significance level: *** (P <0.001).

[a] There is no direct line-by-line association between the grid to the left of the vertical dark line and the "Sum" and "%" columns to the right of the vertical dark line. That is: there is no direct, line-by-line association between the "Parent Only" line in the grid and the "Diagonal" in the "Sum" column, nor is there any direct line-by-line association between any of the other lines in the grid on the left of the table and the information on the right of the vertical dark line. As explained in the text, the "Diagonal" % on the right is the sum of the percentages on the diagonal of the grid on the left. The "Above Diag (A)" on the right is the sum of the percentages above the diagonal in the grid on the left. And so on.

For some issues girls' and their parents' views show a high level of agreement. The agreement is sometimes conservative, for example in the cases of schooling and marriage decisions, and public mobility. In other cases, the agreement supports a more liberal point of view, such as going to private places and decisions about friends and spare time. Regarding disagreement, girls generally take a more conservative perspective than their parents, though the net differences are fairly small.

In the last part of the analysis, we examine whether the type of school attended affects the degree to which girls agree or disagree with their parents, and the nature of any disagreement. If girls and their parents disagree, do the girls in CS take a more empowered position than the girls in MPS, as the Egypt CS literature would suggest? For this analysis we recoded the results reported in Tables 3 and 4 to create a new similarity index for each empowerment factor. Each index recodes the nature of agreement and disagreement between girls and their parents into four categories:

1. Conservative agreement: girls and parents agree on a conservative/restricted point of view. That is, both parts of the dyad agree that girls have *no* say in making decisions or girls *cannot* go to any places alone.
2. Liberal agreement: girls and parents agree on more liberal views. That is, both parts of the dyad agree that girls should have at least some say in making decisions, or can go to at least one place on her own.[11]
3. Liberal disagreement: girls have a more liberal point of view than their parents. For example, girls think that they should play a greater role in making decisions related to their lives than do parents.
4. Conservative disagreement: girls have a more conservative perspective than their parents. This is the opposite of the disagreement in code 3.

For all the empowerment factors, the distribution of the similarity index of the agreement/disagreement between schoolgirls and their parents of CS is largely akin to that of MPS (see Table 5). However, the little differences between these similarities are not statistically significant by school type, except in the case of public mobility. In this case, the results show that while both CS and MPS girls generally agree with their parents, MPS girls are more likely to agree, and this agreement is much more likely to be conservative. Moreover, CS girls are more likely than MPS girls to take a more liberal position than their parents.

Table 5. Girls and Parent Similarity Index of Empowerment Factors by School Type

	CS	MPS	N
Decision-Making	%	%	
Schooling			
Agreement: Conservative	25.2	23.0	102
Agreement: Liberal	19.3	16.4	76
Disagreement: Girls More Liberal	24.0	29.1	109
Disagreement: Girls More Conservative	31.5	31.5	132
Marriage			
Agreement: Conservative	21.3	22.6	78

(*Continued*)

Table 5. Continued

Agreement: Liberal	24.0	19.5	80
Disagreement: Girls More Liberal	23.1	18.8	77
Disagreement: Girls More Conservative	31.6	39.1	123
Friends and Spare Time			
Agreement: Conservative	2.0	0.6	6
Agreement: Liberal	45.1	46.3	188
Disagreement: Girls More Liberal	24.9	28.1	108
Disagreement: Girls More Conservative	28.1	25.0	111
Mobility			
Public Places* **			
Agreement: Conservative	37.3	57.8	194
Agreement: Liberal	18.6	17.5	78
Disagreement: Girls More Liberal	27.4	15.1	97
Disagreement: Girls More Conservative	16.7	9.6	60
Private Places			
Agreement: Conservative	8.7	5.3	32
Agreement: Liberal	56.7	55.3	243
Disagreement: Girls More Liberal	19.4	21.2	87
Disagreement: Girls More Conservative	15.2	18.2	71
N	254	165	419

Significance level: *** (P <0.001).

dISCuSSIon And Con Cl uSIon

Rural Upper Egypt is a traditional society where girls are generally assumed to be marginalized (Assaad & Krafft, 2015; Hussein, 2016; National Council for Women, 2017; Zabani and Brady, 2011). In such areas, families are often judged on the community's perception of the behavior of a family's girls/women outside the house. Fear of sanction for violating social norms can tend to sustain traditional values and attitudes (Harper et al., 2018). These circumstances may result in more family control over females and less women's empowerment (Paterson, 2008). Previous research suggests that girls become empowered when they have choices about the direction of their lives, the opportunity to select among those choices, and the ability to act on the decisions they make (Kabeer, 1999). Education can be empowering; CS are said to effectively educate and empower their students, even though those students come from poor families living in remote areas (Zaalouk, 2004). This research is the first in

Egypt to compare the empowerment of girls in different types of schools, and to examine whether education in general affects the empowerment of girls in traditional communities such as those of Upper Egypt.

Though the sample of girls and their parents is relatively small, and the results cannot be generalized to other villages, nor to the country as a whole, this study begins a discussion of the impact of education on girls' empowerment in rural Upper Egypt. CS education can be either adaptive or transformative (Hoppers, 2005). In Egypt, previous research reported that the Egyptian CS were transformative (Zaalouk, 2004). However, over the last decades, the education environment has changed. Almost all villages have an MPS. Most CS now fall under the sole administration of the Ministry of Education and receive only the resources the government is able to provide (Hussein, 2016). Consistent with Hoppers' (2005) typology, the CS we studied were not transformative. Rather, they should be seen as adaptive, following essentially the same curriculum and delivering effectively the same education as MPS.

There are only small, insignificant differences in the level of empowerment between the CS and MPS girls, except in the case of public mobility. The views of girls on decision-making and mobility, whether they attended an MPS or a CS, are not significantly different from those of their parents. In crucial matters (schooling and marriage decisions, and public mobility), the similarity between girls and their parents is conservative, while in less critical issues (going to private places and decisions about friends and spare time), it is more liberal. A causality structural model in other research shows that parents' way of thinking directly influences and shapes their daughters' thinking (Bolla & Abdelkhalek, 2021). This implies that parents have more influence on girls' thinking than does the type of school she attends. This is exactly what the norms of a traditional society dictate; girls must respect and follow the decisions of their parents, even though this leaves the young girls disempowered. Education that seeks to empower girls must engage parents, and most likely the broader community, in a program of change (Harper et al., 2018; Murphy-Graham & Lloyd, 2016).

Two of the areas we assess are particularly pivotal in determining a girl's future—her education and her marriage. Programs that seek to foster girls' empowerment frequently focus on delaying marriage, in large part because this allows girls to complete their educations (Unterhalter et al., 2014). Basic education can empower girls, increasing their aspirations for more education and making them conscious of their rights regarding the timing and circumstances of their marriage (Warner et al., 2014). Yet, the

girls in our sample play, at most, only a limited role in decisions about education (when to start and whether to stay in school) or marriage (choosing a partner and deciding when to marry). For each of these factors, the modal category in Table 3 shows girls and parents agreeing that these decisions are solely the responsibility of the parents (24.3% and 21.8%, respectively). Another 10–17% of girls agree with their parents that the girls should have only a limited role in these decisions. When girls and parents disagree, parents say that they would allow their daughter more of a role in these decisions[12]. This is seen from the negative sign of the difference between sums of upper and lower diagonal cells.

Why has education in Egypt failed to empower more girls?

First, we acknowledge that the primary school girls in our sample are mostly young; 81% are between the ages of 8 and 12 years. Though some programs target girls in upper primary (CARE n.d.), and girls as young as 12 years old are said to be able to successfully convince their parents to allow them to act on decisions the girls themselves have made (Farrell and Hartwell, 2008; Zaalouk, 2001; 2004), other programs focus on older adolescents, often those in secondary school (Marcus & Page, 2016; UNESCO, 2015).

More importantly, a number of recent studies have emphasized that simple *access* to education is not sufficient to empower girls (Kabeer,1999; Unterhalter et al., 2014). At a minimum, girls must stay in school long enough for learning to meaningfully impact their lives (UNESCO, 2015). However, some have suggested that formal education, in particular, faces severe limits on its ability to provide transformative education (Stromquist, 2015). Mainstream government schools tend to restrict curricula and pedagogy that seek to challenge the status quo. In Egypt, CS have had greater flexibility to introduce different texts and ideas into their curricula. Perhaps the original UNICEF CS were able to help girls develop new goals, and take the actions necessary to achieve them, thus empowering their students. However, the UNICEF CS served girls who had no other opportunity for education. When CS are integrated with a larger system, the quality of the education they provide declines (Naidoo, 2009) and they face many of the same constraints as do MPS.

Moreover, to effect change in rural villages requires community level involvement (Harper et al., 2018; Murphy-Graham & Lloyd, 2016). The UNICEF CS worked hard to develop a rapport with the community (Zaalouk, 2004). Perhaps that rapport made possible a discussion of the societal change required to allow girls to act on new ambitions. However, community involvement in the CS has largely been lost over the years (Hussein, 2016). Programs that focus on the individual are unlikely to uproot

entrenched community norms (Warner et al., 2014). It is difficult for young girls to confront such norms; they face the risk of sanction for deviating from socially acceptable behaviors (Harper et al., 2018). Thus, a model that works to change parents and the broader community best prepares girls, and all students, for further education that can broaden their perspectives on the world and give them opportunities that would otherwise be unavailable.

To summarize, in the rural Upper Egypt villages we studied, though girls in the CS, are slightly older than those in the MPS, there is no evidence that girls in community schools are more empowered compared to their peers in the government primary schools. We find that girls in both types of schools largely agree with the traditional attitudes of their parents which reflect the norms of their surrounding environment. This suggests that the CS in Egypt may no longer be transformative but rather are adaptive.

APPEnd Ix

Percent Distribution of the Item-Based Assessment Questions (Observable Variables) of the Empowerment Domains for Girls and Their Parents

Domain/Factors	Observable Variables	Girls	Parents
Decision-Making		%	%
Schooling	**Entering School**		
	Parents Only	62.3	59.9
	Both	24.5	23.5
	Girls Only	13.2	16.6
	Continue Education		
	Parents Only	50.7	46.3
	Both	28.1	28.0
	Girls Only	21.2	25.7
Marriage	**Marriage Time**		
	Parents Only	66.5	64.2
	Both	27.3	30.5
	Girls Only	6.2	5.3
	Choosing Husband		
	Parents Only	52.8	33.7
	Both	33.0	39.7
	Girls Only	14.2	26.6

(*Continued*)

Appendix Continued

Friends and Spare time	**Choosing Friends**		
	Parents Only	9.9	11.2
	Both	9.3	17.5
	Girls Only	80.7	71.3
	Spending Spare Time		
	Parents Only	43.3	34.9
	Both	17.6	24.5
	Girls Only	39.1	40.6
Mobility			
Public	Market	24.4	21.5
	Field	26.0	23.3
	Canal	14.8	10.9
Private	Friends' House	74.3	74.2
	Relatives' House	75.3	71.4
	N	490	433

Notes

1. Except where otherwise indicated the preceding sentences describing the situation in rural Upper Egypt are based on the 2014 Egypt Demographic and Health Survey (Ministry of Health and Population 2015).

2. About 9 % of the CS students in our sample received private tutoring.

3. All results for 1992 are the authors' computations from Egypt Demographic and Health Survey data.

4. For the percent distribution of the observable questions, see the Appendix.

5. See the footnote number 4 above.

6. The wealth index is based on a sample of all households in the study villages. For a detailed explanation of wealth indices see Filmer and Pritchett (2001).

7. Table 2 shows results for the Mann-Whitney U test. The higher the average rank, the greater the level of freedom and responsibility the girl expresses.

8. We are using the word "conservative" to mean that either the parent, the girl, or both think that girls have no say in decision-making and/or cannot go to places alone, while the word "liberal" corresponds to the contrary situation.

9. A zero net difference says nothing about the amount of difference between girls and their parents. The level of difference may be large. If differences are large, but the net difference is small, or zero, this indicates that many girls have more liberal views than their parents, and, at the same time, a similarly large number of girls have more conservative views.

10. We calculate the difference between the sum of the upper off-diagonal cells, minus the sum of the below off-diagonal cells [(6.4 +6.9+1.2+3.6+3.1+0.5+0.7+1.0+2.1+0.5)—(5.5+9.1+1.2+5.3+1.7+1.2+1.2+1.9+3.6+1.0) = (26.0—31.7) = -5.7].

11. Note that this more "liberal" position is not always *very* liberal. Sometimes it means that girls and parents simply share decision making in one area.

12. For the observable variable frequency table, see the Appendix.

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