Qatar Education Study 2018

Executive Summary
June 2019

Private Tutoring Report

Social & Economic Survey Research Institute (SESRI)
Qatar University
P.O. Box 2713, Doha, Qatar

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The mandate of the Institute is to conduct survey research on economic, social and cultural issues that are of direct and vital significance to the development and welfare of Qatari society. Equally important, the Institute strives to build capacity within Qatar University (QU) in survey research methodology by serving as a platform for QU faculty and students to conduct their own research. Along those lines, the Institute offers training in survey research with special emphasis on topics of interest to the academic community and to Qatari society as a whole.

THIS REPORT WAS PREPARED BY:

Dr. Abdel Latif Sellami, LPI, SESRI, Qatar University.

REVIEWED BY:

Prof. Hassan Al-Sayed, Director, Social and Economic Survey Research Institute (SESRI)
John Lee Pratt Holmes, Unit Head of CATI Operations, SESRI, Qatar.

RESEARCH TEAM:

Dr. Abdel Latif Sellami, LPI, SESRI, Qatar University.
Dr. Nada Abdelkader, Co-LPI, SESRI, Qatar University.
Dr. Kien Trung Le, SESRI, Qatar University.
Rima Charbaji Elkassem, SESRI, Qatar University.
Noof Abdulhadi J H Al-Rakeb, SESRI, Qatar University.
Maryam Fahad H.K. Al-Thani
Mohammad Hassan M A Al-Ansari
Haneen B.K. AlQassass, SESRI, Qatar University.
Musaab Othman M I Alkhtib
Noora Essa A E Al-Mannai

DATA COLLECTION:

Elmogiera Elawad, Survey Operations Manager, SESRI, Qatar University.
Saleh Ibrahim Ali and Mohamed Agied, Survey Operations Assistants, SESRI, Qatar University.
Anis Miladi, Section Head of Survey Programming and Development, SESRI, Qatar University.
Isam M. Abdelhameed, Information Technology Projects Manager, SESRI, Qatar University.
Ayman Al-Kahlout, Information Technology Specialist, SESRI, Qatar University.
Mohamed Agied, Survey Operations Assistant, SESRI, Qatar University.

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1. PREFACE

This report – the first of five reports published by the Social and Economic Survey Research Institute (SESRI) – summarizes the main results derived from the Qatar Education Study (QES) 2018. As was the case in the previous editions of the Qatar Education Study, which were implemented in 2012 and 2015, the 2018 round of QES is a set of four different surveys carried out by SESRI in October–November 2018. These consist of student, parent, teacher, and school administrator surveys.

The aim of the QES 2018 was to examine the views of participants toward various aspects of pre-college education in Qatar. More specifically, the focus of the QES 2018 is on preparatory (8th and 9th grade) and secondary (11th and 12th grade). Combined, the surveys included 3,380 participants representing 34 preparatory and secondary schools. The following table demonstrates the numbers of schools and participants involved in the QES 2018 (see Table 1-1).

Four types of school make up Qatar's school system: Government (public) schools, International private schools, Arabic private schools and Community schools, which follow the curricula of particular countries. In addition to the first two types, Arabic private and Community schools are subsumed under the 'other' category in this study.

The information included in this report is based on the main results arrived at from the 2018 Qatar Education Study (QES). As a whole, the five QES reports provide valuable information on areas that are of crucial importance to the school system in Qatar, including students' motivation and future aspirations, school facilities, the school curriculum, student and parental satisfaction, and private tutoring.

The main goal of these five reports is to inform education policy and practice whilst also contributing to achieving the overall goals outlined in the Qatar National Vision 2030 (QNV 2030). Based on the results provided in these reports, relevant implications for policy and practice will be offered as they relate to the specific areas covered in each report.

Table 1-1: Numbers of Schools and Participants in the Qatar Education Study 2018

Total Number of surveyed schools	34 Schools		
	Government Schools 61.76% (n=21) schools	**International Schools** 20.59% (n=7) schools	**Other Schools** 17.65% (n=6) schools
Total number of surveyed students	1639 Students		
	Government Schools 52.96% (n=868) students	**International Schools** 29.47% (n=483) students	**Other Schools** 17.57% (n=288) students
Total number of surveyed parents	1142 Parents		
	Government Schools 46.58% (n=532) parents	**International Schools** 34.15% (n=390) parents	**Other Schools** 19.26% (n=220) parents
Total number of surveyed teachers	424 Teachers		
	Government Schools 62.97% (n=267) teachers	**International Schools** 26.42% (n=112) teachers	**Other Schools** 10.61% (n=45) teachers
Total number of surveyed school administrators	175 Administrators		
	Government Schools 69.71% (n=122) administrators	**International Schools** 13.14% (n=23) administrators	**Other Schools** 17.15% (n=30) administrators

The QES 2018 explores the views expressed by students, parents, teachers and school administrators and their attitudes toward the existing preparatory and secondary school system in Qatar. Available literature that examines K-12 education generally in Qatar remains limited and the overall school system in the country is largely under-researched.

The schools covered in this study represent a cross-section of the major school types (i.e., Government, International and "other" schools) as well as coeducational and single-gender programs. Taking this into account, the design of the QES 2018 allows for analyzing the data with a view to drawing comparisons within and between groups of students, parents, teachers, and school officials. This allows for studying relevant issues from the combined perspective of students, parents, teachers and administrators.

By examining respondents' beliefs about various aspects of the school system in Qatar, this study seeks to provide a realistic and up-to-date portrait of preparatory (8th and 9th grade) and secondary (11th and 12th grade) education in Qatar based on the results derived from the survey. The study's results will aid in painting a picture of the state of affairs at the different schools in Qatar and as such will depict what works and does not work in the school system. Ultimately, the study will be useful in highlighting areas of schooling that need improvement and ways of fostering student success as they look forward to the future.

The results reported here shed light on six areas related to policy and decision-making:

- The spread of private tutoring in Qatar,
- The school subject(s) private tutors are hired for,
- The reasons for using private tutoring,
- The frequency of using private tutoring,
- The potential benefits of private tutoring, and
- The estimated cost of private tutoring.

We welcome your questions and comments, which may be directed to sesri@qu.edu.qa.

2. INTRODUCTION

Private tutoring – sometimes referred to as 'shadow education' – is a flourishing business in many countries around the globe. Within Qatar, private tutoring takes different forms such as one-to-one, small group and large class tutoring. Moreover, a range of alternatives are on offer via tutoring centers or institutes as well as private tutorials provided in the tutor's or tutee's home.

Despite growing anecdotal evidence confirming the widespread use of private tutoring in Qatar, very little is known about this phenomenon in Qatar and the broader Arab region. The only published materials known to have examined this topic in the context of Qatar are two reports prepared by the Social and Economic Survey Research Institute (SESRI) at Qatar University: the Qatar Education Study (QES) 2012 and the Qatar Education Study (QES) 2015 (see SESRI, 2012, 2016). Unfortunately, however, both reports and the studies they are based on provide only a rather cursory and general account of the phenomenon of private tutoring in the country.

Drawing on the QES 2012 and QES 2015, and the results derived from each, this part of the present study – the Qatar Education Study (QES) 2018 – seeks to provide a more detailed examination of how private tutoring is used in Qatar. Insights gained from the review of the existing literature on the topic informed the present study and guided the questions it aims to address.

In order to gain a better understanding of the various aspects of private tutoring trends in Qatar, Qatari and expatriate students and their parents were asked a series of questions that probe their views and opinions regarding the use of private tutoring in the country. This part of the QES 2018 reports demonstrates important results concluded from respondents' answers to those questions. In so doing, emphasis is placed – where relevant – on the variables of gender, nationality and school type.

3. PRIVATE TUTORING USAGE IN QATAR

How common is the use of private tutoring in Qatar?

To have a sense of the extent of private tutoring consumption in Qatar, respondents were first asked whether they use private tutoring. In general, the results indicate that 40% of students and 34% of parents reported hiring a private tutor. Breaking the results down by nationality, gender and school type unravels some interesting patterns.

Looking at the students' nationality, for example, shows that 63% Qatari and 29% non-Qatari students reported using private tutoring. More specifically, whereas student data reveal that private tutoring is slightly more common amongst Qatari students than their non-Qatari counterparts, parents' responses disclose a different pattern. For based on the results derived from parental data, it is clear that about a third of parents (34%) appear to use a private tutor for their children in Qatar. Half of these (51%) are Qatari and over a third (28%) non-Qatari.

With regard to the students' gender, the results reveal that marginally more male (42%) than female students (38%) reported using private tutoring (see Figure 3-1).

Figure 3-1: Use of private tutoring, by gender
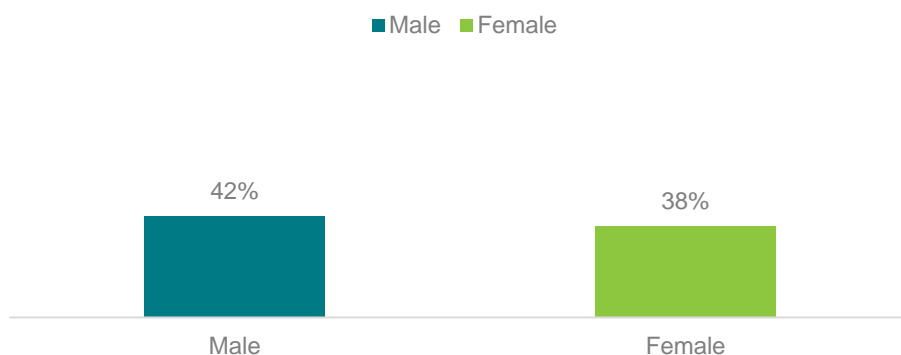
When the students' grade level is factored in, the results demonstrate that 12th Grade students tend to be the group that makes the most use of private tutoring (56%), followed by those in Grade 9 (40%), Grade 8 (38%) and then Grade 11 (35%) (see Figure 3-2).

Figure 3-2: Use of private tutoring, by grade level

Grade 8	Grade 9	Grade 11	Grade 12
38%	40%	35%	56%
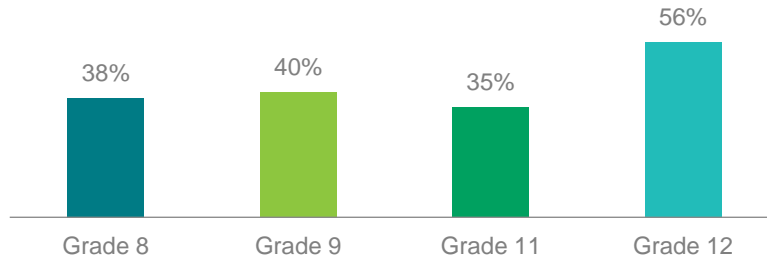
Concerning the type of school that the students attend, the results further reveal that Government school students seem to hire a private tutor more than do students at International or other schools do. Hence, close to half (45%) of Government school students use private tutoring, compared to their counterparts at International (34%) or other (35%) schools (see Figure 3-3).

Figure 3-3: Use of private tutoring, by school type

Government schools	International schools	Other schools
45%	34%	35%
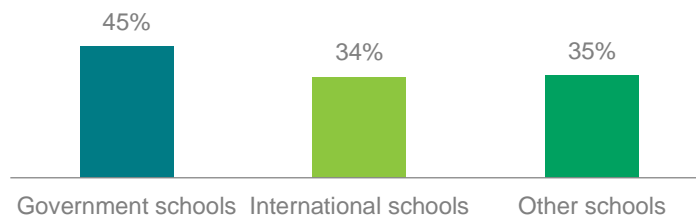
What type of private tutoring is the most preferred?

Students were also asked about the type of private tutoring they use and the results point to a general tendency among students to opt for private tutoring sessions in their own houses. As Figure 3-4 demonstrates, 57% of the students reported that they use private tutoring sessions in their houses. In contrast, a fifth (20%) indicated that they use a tutoring center or institute. An even smaller number of students (14%) reported taking private tutoring classes in the private tutor's home while another 9% stated they use group tutoring.

Figure 3-4: Type of private tutoring used
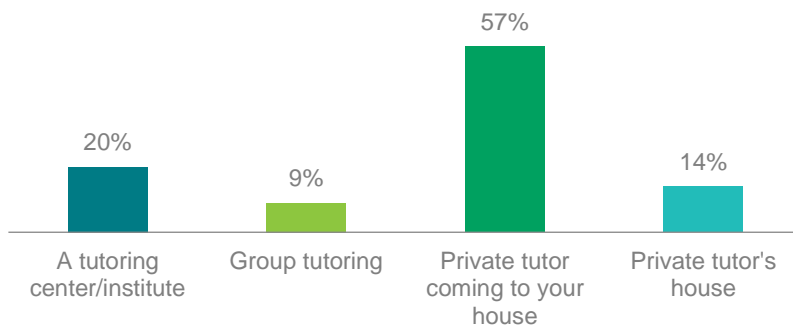
Examining male and female students' responses, the data (Figure 3-5) does not point to any major gender variance. Indeed, the results indicate that both sexes generally seem to have similar preferences for the type of tutoring they use with only marginal differences observed for group tutoring (10% male and 7% female) and tutoring centers or institutes (18% male and 22% female).

Figure 3-5: Type of private tutoring used, by gender

■ Male ■ Female
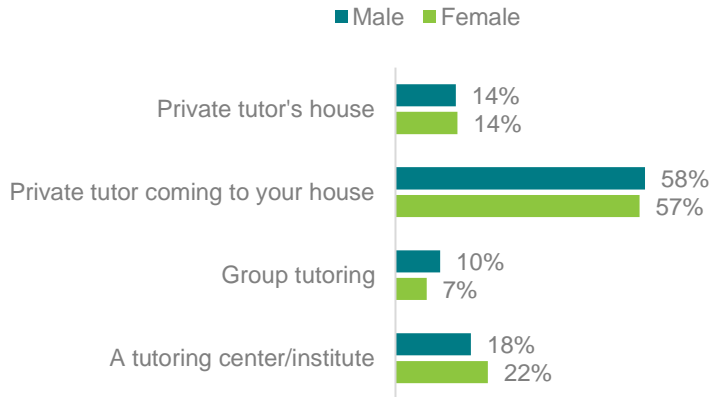
With regard to nationality, the results show (Figure 3-6) varying degrees of variance between Qatari and non-Qatari students' responses with respect to the type of tutoring utilized. It is evident that the majority of Qatari students (83%) hire a private tutor coming to their home. In contrast, their non-Qatari counterparts are more likely to either have private tutoring classes at a tutoring center/institute (30%) or at home (30%).

Figure 3-6: Type of private tutoring used, by nationality

■ Qatari ■ Non-Qatari
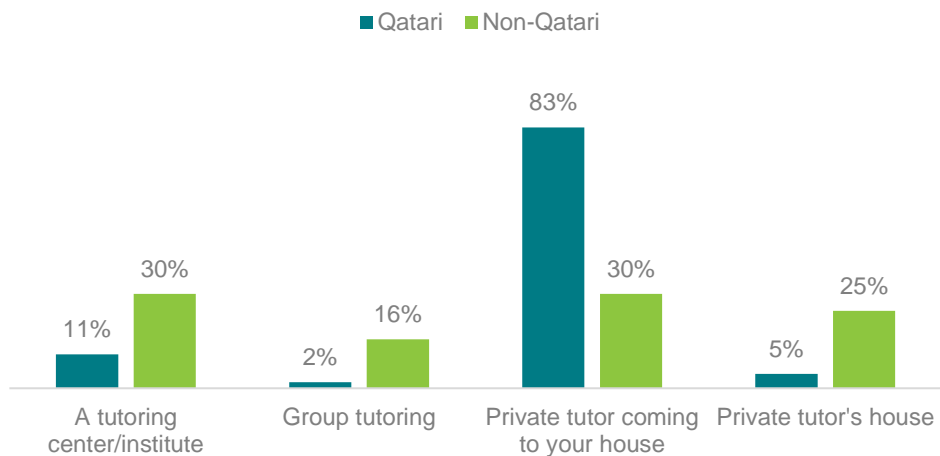
Concerning school type, the results yield a clear discrepancy between the responses of International school students, on the one hand, and those of their counterparts at Government and other schools, on the other. Thus, while students from Government and other schools tend to hire a private tutor who comes to their home, International school students are more likely to take tutoring classes in a tutoring center or institute or a private tutor's house. As Figure 3-7 below demonstrates, whereas Government and other school students generally tend to hire a private tutor who offers tutorials in their house (73% and 72%, respectively), their counterparts at International schools reported using a tutoring center or institute (41%) or going to a private tutor's house (32%).

Figure 3-7: Type of private tutoring used, by school type
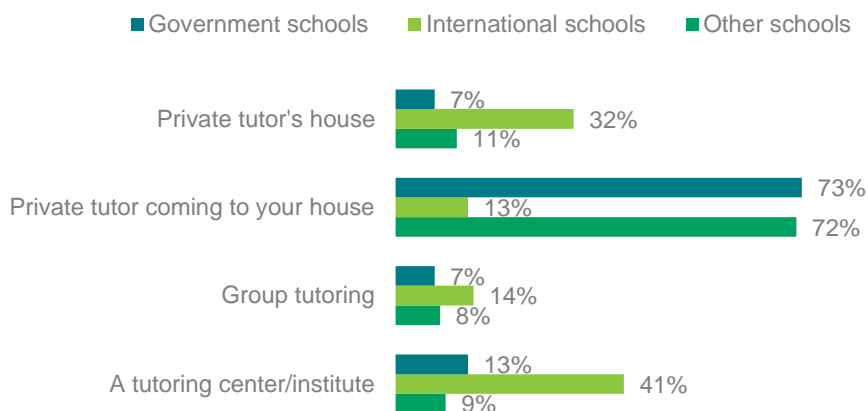
What school subject(s) are private tutors hired for the most?

Elsewhere in the questionnaire, respondents were asked about the school subject(s) for which they hire a private tutor and were instructed to choose from a list of four options: 1) mathematics, 2) science, 3) English, 4) Arabic. The list also included an "Other" option (with an open-ended, "please specify" space). The results derived from the respondents' answers are displayed in Figure 3-8 below.

As is shown in Figure 3-8, students' responses reveal that mathematics ranked first (69%) as the school subject that students use private tutoring for the most. By contrast, science ranked second (42%), followed by English (36%) and Arabic (21%). The other option comprised (17%).

Figure 3-8: School subject(s) private tutoring is used for (students)
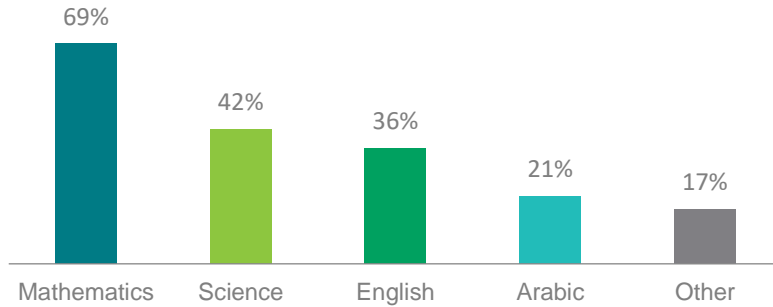
Looking at students' gender, the results (Figure 3-9) also reveal that males are more likely to consume private tutoring, to varying degrees, for all four school subjects.

Figure 3-9: School subject(s) private tutoring is used for (students), by gender
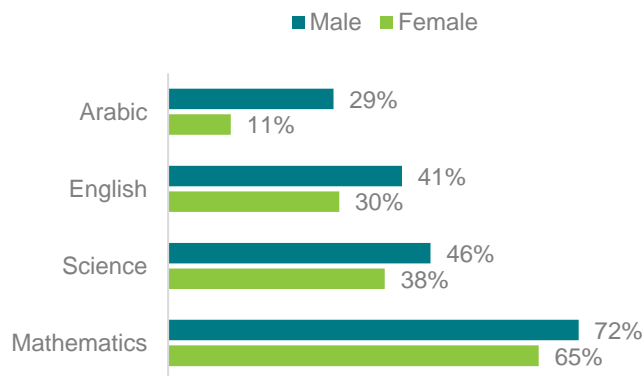
When students' nationality and school type are taken into account, the results consistently disclose largely similar patterns, particularly regarding mathematics, science and English. Looking at nationality, As is shown in Figure 3-10, 72 per cent of Qatari and 65 per cent non-Qatari students reported using a private tutor for mathematics followed by science (46% Qatari and 38% non-Qatari students) and English (42% Qatari and 30% non-Qatari students).

Figure 3-10: School subject(s) private tutoring is used for, by nationality

■ Qatari ■ Non-Qatari
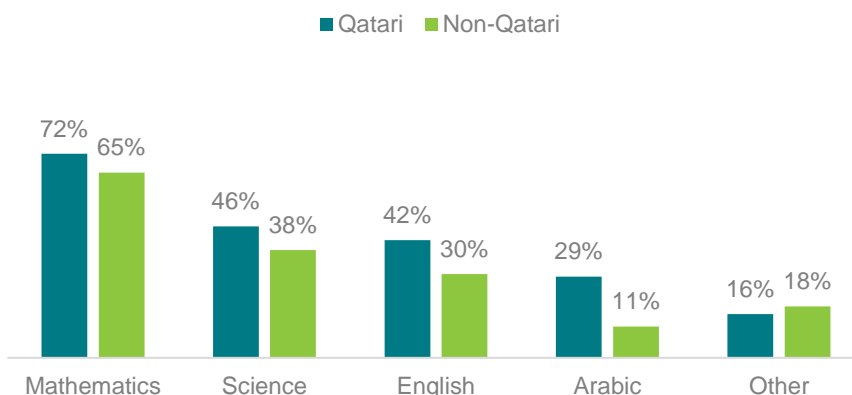
Consistent with the results concluded for the gender and nationality variables above, the findings related to school type point to mathematics as the subject for which students hire a private tutor the most, regardless of the type of school they belong to. Thus, over two thirds of the student respondents indicated using private tutoring for the mathematics subject, i.e. 69% of Government, 71% of International and 65% of other school students (see Figure 3-11).

Whereas science as a subject for tutoring ranks second for both Government (44%) and International (47%) school students, the results point to its use by a mere 23% of their counterparts at other schools. Moreover, close to half (45%) of the students at Government and other schools each indicated they hire a private tutor for English, compared to only 9% at International schools.

Taken together, the results demonstrate the following patterns:
- Mathematics appears to be the school subject a private tutor is hired for the most by Government, International and other school students alike,
- Second to mathematics, science is to a lesser extent another subject for which a private tutor is often hired by Government and International students, and
- Students attending Government and other schools are also likely to use private tutoring for English and Arabic.

Figure 3-11: School subject(s) private tutoring is used for, by school type

■ Government schools   ■ International schools   ■ Other schools

Mathematics
- 69%
- 71%
- 65%

Science
- 44%
- 47%
- 23%

English
- 45%
- 9%
- 45%

Arabic
- 25%
- 8%
- 22%
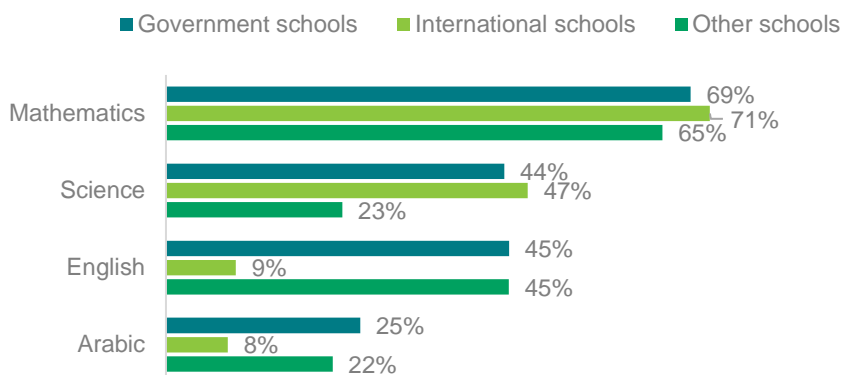
To gain an alternative perspective, parents were also asked about the school subjects for which they hire a private tutor for their children. Taken as a whole, parental data yield results that are similar to those derived from students' data. Mathematics was selected as the school subject that parents hire a private tutor for the most (73%), followed by science and English, which were equally chosen by 34 percent each. By contrast, a mere 18% of parents selected Arabic (see Figure 3-12).

Figure 3-12: School subject(s) private tutoring is used for (parents)

- Mathematics: 68%
- Science: 34%
- English: 34%
- Arabic: 18%
- Other: 15%
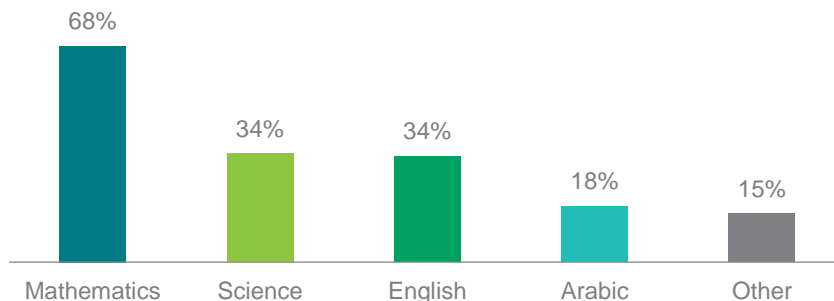
Breaking down parental data results by nationality, the results further reveal that for Qatari and non-Qatari parents alike, mathematics is the likely subject private tutors are most hired for, namely 75% and 72%,

respectively. 47% and 35% of Qatari parents respectively reported hiring a private tutor for English and Arabic compared to their non-Qatari counterparts (English 29% and Arabic 8%).

Interestingly, clear discrepancies are evident in the responses of both groups with regard to English and Arabic in particular. Thus, 47% and 35% of Qatari parents respectively reported hiring a private tutor for English and Arabic, compared to the reported results for their non-Qatari counterparts (English 29% and Arabic 8%). Similar percentages were reported for both Qatari and non-Qatari parents' usage of private tutoring concerning science.

To pass exams is a prime reason why students use a private tutor

To learn about the reasons that drive respondents' consumption of private tutoring, students and parents were given a set of seven options and were instructed to select the two most important reasons from the list. The list included an "Other" option (with an open-ended, "please specify" space). The results concluded from the responses provided by the respondents are given in Figure 3-13 below.

Overall, the results presented in Figure 3-13 reveal that the main reason driving students to hire a private tutor is "To pass exams" (61%). A quarter of the students (25%) indicated using private tutoring because "Teachers do not help students in class," followed by around a fifth (19%) who hire a private tutor because "Teachers do not explain the material well". Interestingly, the intention to attend a reputed higher education institution does not seem to be a main reason influencing students' decisions ?

Figure 3-13: Students' reasons for using private tutoring

Reason	Percentage
My friends advised me to use private tutors	3%
Using private tutors is a sign of wealth	3%
Teachers do not help students in class	6%
To attend a well-known college / university after graduation	11%
My parents think that I need private tutoring	19%
Teachers do not explain the material well	25%
To pass exams	61%
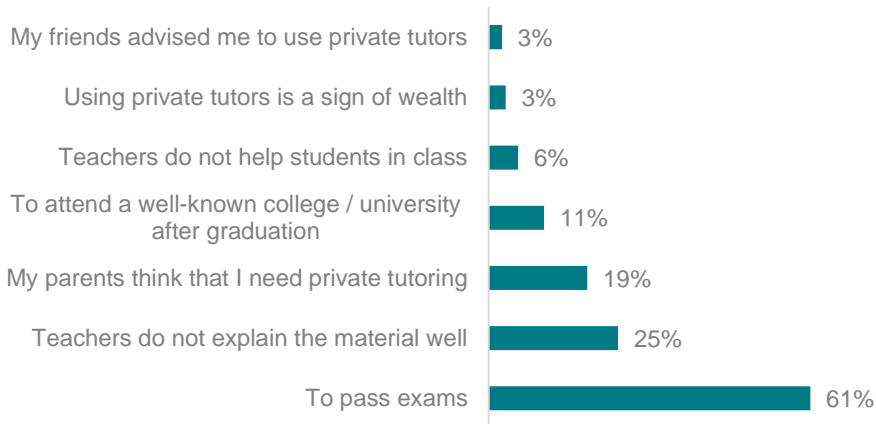
With regard to gender, it appears that there is a general gap between male and female students. For example, the results presented in Figure 3-14 below suggest that males, more than females, reported using private tutoring based on advice from friends (78%) and because hiring a private tutor is a sign of wealth (66%). By contrast, females said they used private tutoring because teachers do not explain the material well (66%) or do not help students in class (56%) and also because their parents feel they need private tutoring (55%).

Figure 3-14: Students' reasons for using private tutoring, by gender

■ Male ■ Female

Reason	Male	Female
My friends advised me to use private tutors	78%	22%
Using private tutors is a sign of wealth	66%	34%
Teachers do not help students in class	44%	56%
To attend a well-known college / university after graduation	57%	43%
My parents think that I need private tutoring	45%	55%
Teachers do not explain the material well	34%	66%
To pass exams	54%	46%
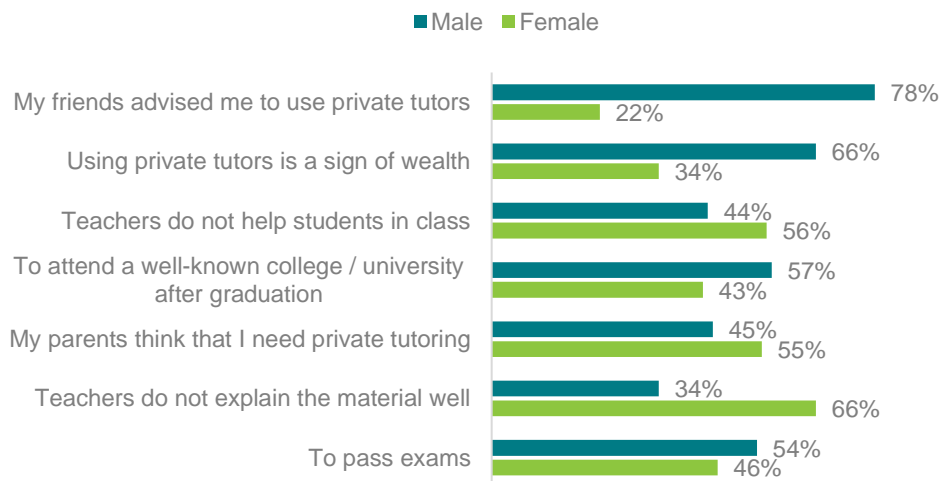
Looking at the nationality of the students, the results disclose some interesting patterns. In general, students' decisions to use private tutoring are more likely to be directly associated with their current studies. As Figure 3-15 demonstrates, Passing school exams and teachers not explaining school materials well are the main reasons suggested by Qatari students, and to a lesser extent their non-Qatari peers (i.e. 74% and 28%, respectively).

In addition, the results further show that two other important drivers of private tutoring that influence choices for non-Qatari students more than for Qataris, consist of parental influence and the intention to attend an elite college or university after graduation from high school. For Qatari students, 26 percent attributed their use of a private tutor to the influence of their parents. An additional 17 percent ascribed their decision to their intention to join a reputed higher education institution once they have completed their pre-university studies.

Figure 3-15: Students' reasons for using private tutoring, by nationality

■ Qatari ■ Non-Qatari

Reason	Qatari	Non-Qatari
My friends advised me to use private tutors	0%	5%
Using private tutors is a sign of wealth	3%	4%
Teachers do not help students in class	7%	5%
To attend a well-known college / university after graduation	5%	17%
My parents think that I need private tutoring	12%	26%
Teachers do not explain the material well	28%	22%
To pass exams	74%	48%
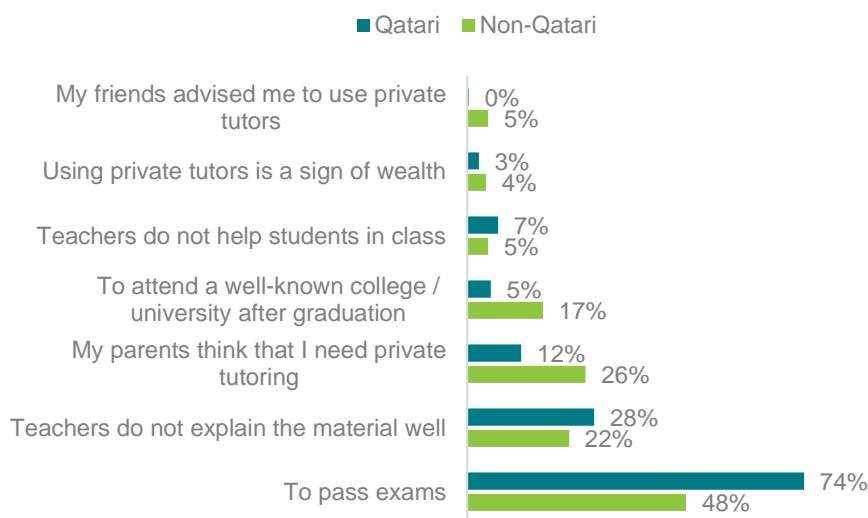
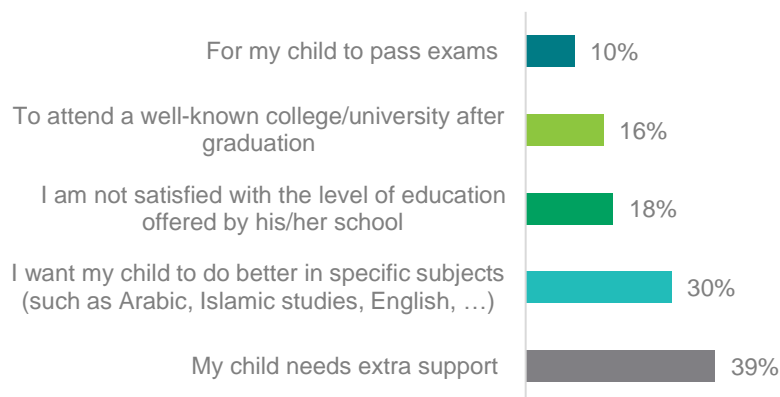When the type of school is taken into account, the results show that the main reason for the consumption of private tutoring is the desire to prepare for and pass exams. Based on the results, it is clear that 70 percent of Government school students reported passing exams as the most important reason for hiring a private tutor. Closely similar results were found for their counterparts at other schools, namely 64 percent. A

comparably lower proportion of students enrolled in International schools, that is 39% indicated preparing for exams as the main reason for their use of private tutoring.

Parents, too, were asked about the reasons why they engaged private tutors for their children and were required to choose the most important reason from a list of five options. The list also contained an "Other" option (with an open-ended, "please specify" space). As is shown in Figure 3-16 below, parents reported "My child needs extra support" (39%), followed by "I want my child to do better in specific subjects" (30%) as primary reasons.

Altogether, the responses provided by students and their parents show that the main reasons for the consumption of private tutoring in Qatar are directly related to children's current studies at school and do not originate from plans to prepare for and secure a place at a reputed institution of higher education.

Figure 3-16: Parents' reasons for using private tutoring

Reason	Percentage
For my child to pass exams	10%
To attend a well-known college/university after graduation	16%
I am not satisfied with the level of education offered by his/her school	18%
I want my child to do better in specific subjects (such as Arabic, Islamic studies, English, …)	30%
My child needs extra support	39%

How often do respondents use private tutoring?

Elsewhere in the questionnaire, respondents were asked about the frequency of using private tutoring and were given four options to choose from (daily, weekly, monthly, during exam periods). The question also included an "Other" option (with an open-ended, "please specify" space). Based on the study's results as a whole, it is clear that the consumption of private tutoring in Qatar is above average. Indeed, it appears that slightly more than half of the students surveyed (52%) stated they hire a private tutor on a weekly basis (see Figure 3-17). An additional fifth of the students (20%) indicated they take private tutoring classes during exam times.

Figure 3-17: Frequency of using private tutoring

- Daily: 16%
- Weekly: 52%
- Monthly: 6%
- During exam periods: 20%
- Other: 6%
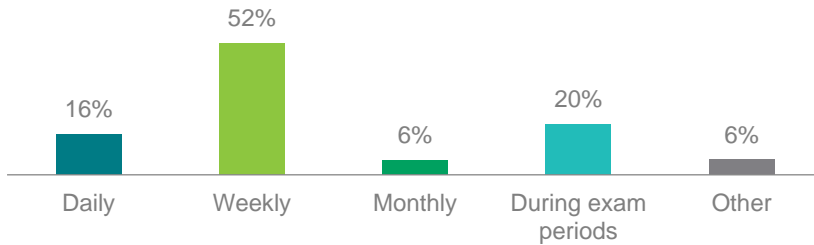
Looking at the students' gender, the results (Figure 3-18) show that while 33% of female students indicated they use a private tutor daily, this is half of the figure reported by males (67%). During the time of exam, however, females seem more likely to use private tutoring (75%) than their male counterparts (43%).

Figure 3-18: Frequency of using private tutoring, by gender

■ Male ■ Female

	Daily	Weekly	Monthly	During exam period
Male	67%	49%	47%	43%
Female	33%	51%	53%	57%
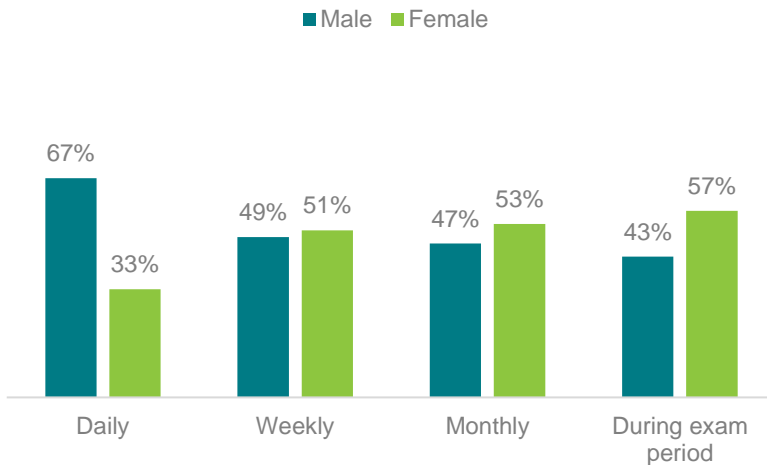
These results are consistent with the views expressed by parents, 58% of whom pointed out their children take private tutoring classes every week. A fifth (17%) reported hiring a private tutor during exam times (see Figure 3-19).

Figure 3-19: Frequency of using private tutoring (parents' views)
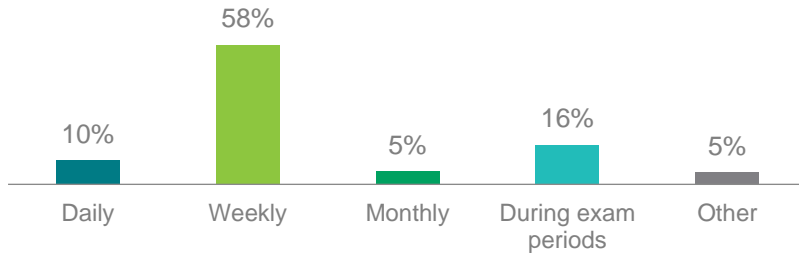
Parents were asked how much, in Qatari Riyals (QRs), they pay for their child's private tutoring per semester. From a list of five cost options, they were also asked to choose the option that corresponds to them. As is shown in Figure 3-20, parents' responses demonstrate that close to half of parents (47%) reported spending from 2,000 to less than 8,000 QRs a semester on their child's private tutoring. Another fifth (21%) stated they spend less than 2,000 QRs. An additional 19 per cent indicated private tutoring costs them from 8,000 to less than 15,000 QRs. Combined, these results demonstrate that just over two thirds of parents appear to spend 2,000 to less than 15,000 QRs.

Figure 3-20: The cost (in Qatari Riyals) parents pay for their child's private tutoring per year
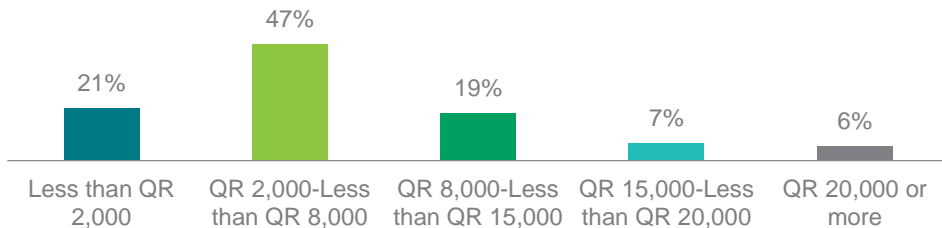
A vast majority of respondents are of the opinion that private tutoring is helpful

Finally, respondents were asked if they find private tutoring helpful to them. According to the study's results, 95% of the students indicated private tutoring was helpful to them (70% strongly agree and 25% somewhat agree with the statement). When nationality is factored in, the results show that an equal proportion of both Qatari and non-Qatari students (95% each) reported finding private tutoring helpful. The results derived from parental data lend further support the findings concluded from the students' responses. Thus, 90% of the parents were of the view that private tutoring helps their children in their studies (46% strongly agree and 44% somewhat agree).

Most parents are not aware of the law regulating private tutoring in Qatar

When parents were asked if they were aware of any legislation that regulates private tutoring in Qatar, the results originating from parental data yield interesting results: only 20% of the parents using private tutoring for their children indicated they are aware of such legislation, compared to 25% who are not. Around half of parents (48%) reported they "do not know" and so one can infer almost three fourths do not seem to be aware.

It is worth noting that despite the ban that is imposed on private tutoring by law in Qatar, the practice of hiring a private tutor is still widespread, and remains largely unregulated. The Peninsula, a daily English language newspaper published in Doha, Qatar, quotes a senior Ministry of Education and Higher Education official saying that the Ministry "has employed inspectors with judicial powers to catch people offering private tuition, in violation of the law" (Mohamed, 2017).

It is true that the Ministry launched a campaign to crack down on private tutors. It is also true that "Neither an existing Government ban on private tuition nor the introduction of 'enrichment classes' in schools has stopped parents from seeking the service of private tutors to help secure high scores for their children. And the fees have shot up due to high demand." (Rao, 2017).

4. CONCLUSION

Private tutoring in Qatar has turned into a lucrative business that still remains under-regulated and will, as a consequence, continue to exist as a concern that besets the system of education in the country. As such, this problem will have far-reaching educational implications. More specifically, it will have serious effects that impact standardized instruction and curriculum design and delivery at different levels of schooling.

Because the ban is written in a way that does not explicitly prohibit seeking the service of private tutors, the practice will persist and demand for these services may even continue to increase. So long as private tutoring gives the promise of helping students in their studies, it will always attract those willing to pay extra to help their children pass exams and secure high scores at school.

The spread of the phenomenon of private tutoring in Qatar may undermine the country's attempts to ensure the provision of education for all and its commitment to securing an equal educational opportunity for all children, regardless of their socio-economic status.

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6. APPENDIX: SURVEY METHODOLOGY

Results from the Qatar Education Study (QES) come from four surveys administered under the direction of the Survey Operations Division at the Social and Economic Survey Research Institute (SESRI). The surveys were sent to central stakeholders in K-12 education: students, parents, teachers, and administrators. This survey design is especially appropriate because it paints a clear picture of the participants' school experience.

Sample design

Sampling is the process of selecting those individuals from a population to estimate characteristics of the whole population. It plays a critical part in any school survey since the ability to make valid inferences to the population, which is the target of the investigation, relies upon a rigorous sample design. In the following, we discuss issues related to the sampling design used in the QES.

Students were the target population for the survey sampling. The sampling frame, which is a list of all those individuals in a population who can be selected, was developed by SESRI based on a comprehensive list of all public and private schools in Qatar which was provided by the Supreme Council of Education. In this frame, all schools are listed with information about school names, address, school gender (boy, girl, or coed), system (Government, International or other types of school), and the number of students in grade 8, 9, 11, and 12.

Based on the information about the school size, school system, gender and grade, we divided the sampling frame into several subpopulations (i.e., stratum). This stratification divided members of the population into subgroups that are relatively homogenous before sampling begins. We tried to make every member of the population have the same probability of being selected (i.e., self-weighting) so proportionate sampling was used to make the proportion of students in each stratum similar between the frame and the sample. That means the number of sampled schools needed to be proportionate to the number of respondents across strata in the frame (assuming that the same number of students was selected from each school).

Inside each stratum, students were randomly selected following a two-stage sampling process which is probably the most commonly used sample design in educational research. In the first stage, the school was selected with probability proportionate to its size (i.e., PPS). This gives an equal chance of selection for students while allowing for a similar number of students to be chosen from each school for each strata. In the second stage, for ease of the field work, we randomly selected one class for each grade in the school and all students in the class were included in the survey.

In the student study, students in grades 11 and 12 in the secondary schools and students in grades 8 and 9 in the preparatory schools were selected. For the parent study, the parents of the students selected in the student study were sent questionnaires. Lead teachers of the classrooms selected for the study were sent questionnaires as were the administrators for the school.

We account for the complex sampling design in the data analysis to ensure the unbiasedness and efficiency of the statistical estimates. Particularly, a weighting variable was created to take into account the selection probability and the non-response. Weighting is a mathematical correction used to give some respondents in a survey more influence than others in the data analysis. This is sometimes needed so that a sample better reflects the population under study.

Sample size, non-response, and sampling error

The sample size of this survey is 42 schools. However, 8 schools refused our survey requests. For the remaining 34 surveyed schools, all students in the selected classes fully participated in the survey. In the final data, we have 1,639 students, 1,142 parents, 424 teachers, and 175 administrators from these schools.

With the above number of completions, the maximum sampling error for a percentage is +/-2.6 percentage points for the student survey. The calculation of this sampling error take into account the design effects (i.e., the effects from weighting, stratification, and clustering). One possible interpretation of sampling errors is: if the survey is conducted 100 times using the exact same procedure, the sampling errors would include the "true value" in 95 out of the 100 surveys. Note that the sampling errors can be calculated in this survey since the sample is based on a sampling scheme with known probabilities. This feature of random sampling is an essential element that distinguishes probability samples from other sampling methods, such as quota sampling or convenient sampling.

Questionnaire development

The questions were designed in English and then translated into Arabic by professional translators. After the translation, the Arabic version was carefully checked by researchers at SESRI who are fluent in both English and Arabic. Next, the questionnaire was tested in a pre-test of four randomly selected schools. This pretest gave valuable information allowing us to refine question wording, response categories, introductions, transitions, interviewer instructions, and interview length. Based on this information, the final version of the questionnaire was created and then programmed for data entry purpose. The questionnaires were sent to stakeholders in November 2018.

Parents of the students who received the student questionnaire were also sent the parent questionnaire to be completed at home. Data were collected from teachers and administrators through interviews conducted in their respective schools.

Survey Administration

Each interviewer participated in a training program covering fundamentals of school survey, interviewing techniques, and standards protocols for administering survey instruments. All interviewers practiced the questionnaire before going to the schools. In general, interviewers were expected to:

- Locate and enlist the cooperation of schools and students.
- Motivate teachers and students to do a good job.
- Clarify any confusion/concerns.
- Observe the quality of responses.

Data were collected from students and parents using paper questionnaires (Paper-and-Pencil Interviewing – PAPI). Teachers and administrators from the selected schools were interviewed by SESRI fieldworkers using Computer-Assisted Personal Interviewing (CAPI).

Data Management

After data collection was completed, interviewers manually entered responses from students and parents into Blaise, which is a computer-assisted interviewing system and survey processing tool. The responses were then merged into a single Blaise data file. This dataset was then cleaned, coded and saved in STATA formats for analysis. After weighting the final responses, the data were analyzed using STATA 14 which is general purpose statistical software packages commonly used in the social sciences. Tables and graphs were generated in Microsoft Excel and Word.