Parental Perspectives on Private Tutoring in Qatar: Results from the 2019 Qatar Education Study

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Abstract

The present study sought to identify the factors likely to influence parental use of supplementary private tutoring in the State of Qatar. The study was guided by Hirschman's concepts of exit, voice, and loyalty embedded in the theory of political science. Drawing on documented international research, a survey was developed to unpack the factors influencing parental use of private tutoring. The study involved 1.142 parents of students in grades 8, 9, 11 and 12 in both public and other (international, community, private Arabic) schools. Using binary probit regression analysis, results derived from this study disclosed five predictors of private tutoring usage among parents. These include the mother's education level, the student's school grade, the cost of education-related activities, the type of school a child attends, and the child's absenteeism from school. The article discusses these results and raises issues that call for attention in local and international educational research. It offers important recommendations for policy and practice.

Keywords: Private tutoring; Education; Probit regression analysis; Qatar

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وجهات نظر أولياء الأمور حول الدروس الخصوصية في قطر: نتائج دراسة التعليم في قطر لعام 2019

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ملخص

سعت هذه الدراسة إلى تحديد العوامل التي تؤثر على استخدام أولياء الأمور للدروس الخصوصية التكميلية في قطر. استرشدت الدراسة بمفاهيم هرشيان (Hirschman) المدرجة في نظرية العلوم السياسية، وهي: المنْفَذ (المَخْرَج)، والتعبير، والولاء. بالاستناد إلى الأبحاث الدولية الموثقة، تم تطوير استبيان للتعرف على أهم العوامل المؤثرة في استخدام الدروس الخصوصية. شملت الدراسة 1.142 من أولياء أمور طلبة الصفوف 8 و9 و11 و12 في المدارس الحكومية وغيرها (المدارس الدولية، ومدارس الجاليلت، والمدارس العربية الخاصة). باستخدام تحليل الانحدار الرتبي الثنائي (binary probit regression)، كشفت نتائج هذه الدراسة عن خمسة مؤشرات مرتبطة باستخدام الدروس الخصوصية من قبل أولياء الأمور، وهي: المستوى التعليمي للأم، والصف الدراسي، وتكلفة الخدمات والأنشطة ذات الصلة بالتعليم، ونوع المدرسة التي يرتادها الطالب/ الطالبة، وتغيب الطالب/ الطالبة عن المدرسة. تناقش الورقة تلك النتائج، وتثير قضايا تستدعى الاهتمام في مجال البحث التربوي وتقدم توصيات مهمة لصناع السياسات ولمارسي مهنة التدريس.

الكلمات المفتاحية: الدروس الخصوصية، التعليم، تحليل نموذج الانحدار الرتبي (البروبيت)، قطر

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1. Introduction

The use of private tutoring has of late become the hallmark of many education markets worldwide, particularly in East Asia (Holloway & Pimlott-Wilson, 2020; Ristow, 2019). At present, mainstream public systems of education have been the main, and in many cases the only, providers of schooling. In many countries, pre-college education is free of charge and, in many more, schooling is mandatory. Recently, however, other analogous educational options have become available. Indeed, operating concurrently with public forms of education, private (or supplementary) tutoring, sometimes referred to as shadow education (Bray, 2007, 2013; Bray & Hajar, 2022), is another mode of education on offer.

In Qatar, private tutoring is prohibited and individuals and establishments operating without the proper licenses and approvals from the state's regulatory authority are considered in breach of Law 23 of 2015, which aims at regulating the provision of educational services in the country. Failure to comply with the relevant legislation – by offering private tutoring outside of the Ministry of Education's oversight – entails a serious risk of facing very hefty penalties. Cognisant of the value of tutoring under adequate circumstances, the Ministry of Education and Higher Education in Qatar condoned a number of private tuition providers, including Geometric Centre, Global Academy Education Centre, Kumon Centre, London Academy and Oxford Learning Centre. Approved by Qatar's authorities, these establishments have, to varying degrees, been in operation for nearly two decades, offering supplementary classes, particularly in core subjects such as mathematics, science and English.

Although private tutoring is officially banned in Qatar, it remains a burgeoning and lucrative enterprise in the country. According to the widely used English language newspaper, *The Peninsula*, the Ministry of Education and Higher Education placed a ban on the practice, cracking down on private tutors who violate the relevant laws and regulations by offering private tutoring services (Mohamed, 2017). Nonetheless, the fact of the matter is that private tutoring within Qatar is in high demand by many students and their families. Demonstrably, the nature, scope and value of private tutoring differ from one country to another (Bray & Hajar, 2022; Entrich, 2020b; Zhang & Bray, 2020). This study sought to unveil what shapes parents' decision to hire a private tutor for their children. In so doing, the aim was to also extend the existing literature by offering a Middle Eastern, Arab perspective on private tutoring in Qatar, a country that has not been addressed in studies carried out in Western contexts.

The rest of this current paper is structured as follows: the section below provides an overview of the relevant literature on private tutoring, focusing on key drivers of private tutoring usage. Section Three outlines the methodology employed in conducting the present research, including a description of the research design, the study's participants, and data collection procedures. This section also explains the steps followed in analysing data and the mode of analysis used. Results of the study are presented in section Four, while the discussion of the findings is provided in section Five. Finally, section Six concludes the study and provides some relevant recommendations.

2. Literature Review

Research reveals different understandings of what private tutoring entails (Ghosh & Bray, 2020; Marshall & Fukao, 2019). For example, Guill and Bos (2014) and Kirby (2016) note that private tutoring

refers to additional or supplementary instruction offered outside official (mainstream) school classes in exchange for financial remuneration. For Brehm and Silova (2014), private tutoring is no more than "simply a continuation of government school classes" (p. 107). Previous work by Bray (2013), and Kirby (2016) has shown that private tutoring is generally provided on a remuneration basis after regular school classes, including afternoon, evening, and/or during weekend and holiday times (Shih & Yi, 2014).

Another perspective is provided by Lambert and Spinath (2014), who argue that private tutoring involves students that "were mainly doing homework, prepared for exams or repeated the current curriculum or both". For Yung and Bray (2017), three main traits delineate private tutoring: it is (a) a private free-based, (b) supplementary, and (c) academic instruction. The first – 'privateness' – designates instruction offered in return for a fee. The second – 'supplementation' – points to extra instruction that supplements public schooling and occurs outside of regular school hours. The third – 'academic subjects' – covers academic disciplines and thus excludes subjects studied for purposes of leisure or personal development, including art, music, sports, etc.

Documented research on the usage and spread of private tutoring across the globe shows heightened interest in this phenomenon and this is indicative of a blend of educational, economic, and socio-cultural influences (Bray, 2021; Hultberg, Calonge, & Choi, 2021; Tan, 2022). Driven by countless micro-and macro-influences (Guill & Lintorf, 2019; Liu & Bray, 2020), private tutoring has far-reaching implications of relevance to students and their parents, Qatar's system of education, and society at large. Research conducted by Bray and Hajar (2022) and Guill, Lüdtke, and Schwanenberg (2020) identifies macro-level as well as micro-level factors. Macro-level factors include characteristics of the system of education and job market needs (Alam & Zhu, 2022; Sieverding, Krafft & Elbadawy, 2019; Yung, 2019), competition for elite institutions of higher education (Tan, 2017; Zhang & Bray, 2018; Zhang & Yamato, 2018), and the cultural values and perceptions of education in society (Gupta, 2022; Tan, 2022). By contrast, micro-level factors encompass student attributes, such as gender, grade level, school attendance and satisfaction, etc. (Chih-Hao, 2019; Entrich, 2020a; Sellami & Le Trung, 2020).

Rocha and Hamed (2018) conducted a study of students' private (paid) supplementary tutoring after school hours in mainstream schools in the United Arab Emirates. Their study, which involved students in Grades 5, 9, 10, and 12 in public (government-funded) and private schools, focused specifically on math, science, Arabic, and English. A total of 3,929 parents (1,959 Emiratis and 1,970 non-Emiratis) from 58 schools across the country's seven emirates participated in the study. The researchers found that alongside gender, family income, and location (Emirate), nationality is a salient determinant that shapes students' use of private tutoring. For example, they found higher usage of private tutoring amongst Emirati students compared to their expatriate counterparts. Thus, in Grade 9, 27% of Emirati students reported using private tutoring, as compared to 16% non-Emirati. With regard to Grade 10, 34% of Emirati students indicated they use private tutoring, compared to 16% non-Emiratis.

2.1. Problem Statement

Amid official and public concerns over the widespread use of private tutoring in Qatar, parents are under pressure to hire a private tutor for their child and thus enhance her/his chances of meeting school

expectations. This research explores the individual, household, and contextual factors that drive families living in Qatar to hire private tutors. Building on insights from previous research, this study sought to unpack the background and contextual factors shaping private tutoring usage in Qatar. We anticipated there to be an association between participation in private tutoring, parents' characteristics, household characteristics and environmental (school-related) factors. Two specific questions guided this research:

- A. What factors influence parents' participation in private tutoring in Qatar?
- B. Are there any significant relationships between parents' individual, household and school-related factors, and their participation in private tutoring?

3. Methodology

3.1. Study design and sampling

This study's survey data originated from the Qatar Education Study (QES) 2019, a nation-wide survey carried out by the Social and Economic Survey Research Institute (SESRI) in November 2019. The QES 2019 consisted of four survey questionnaires that involved preparatory (grades 8 and 9) and high (grades 11 and 12) school students and their parents. For the purpose of this current study, only the data for parents was analyzed and discussed in this article. Using information obtained from the Ministry of Education and Higher Education, a sampling frame of the QES 2019 was prepared by SESRI, using a list of all public and private schools operating in Qatar. The survey involved a two-stage stratified sample, with schools being the primary sampling units (PSUs) stratified according to the school system, school gender (boy, girl, or co-ed), and grades for a total of 10 strata. PSUs were then sampled with a probability proportional to size with the measure of size being enrollment totals for each stratum and with the allocation of the number of schools to sample per stratum being based on the total enrollment for that stratum, allowing for a self-weighting sample.

To ensure the parent proportion in each stratum was similar between the frame and the sample, a proportionate sample allocation was utilised. The sample size of this survey was 34 schools. Classrooms were the secondary sampling units (SSUs): two classrooms were randomly sampled from each school and all students within the sampled classroom were surveyed along with their parents. In analysing this study's data, this sample design was taken into consideration. In particular, a weighting variable was developed to clarify the different selection probabilities of participants as well as possible non-responses. With the number of completions mentioned above, the maximum sampling error for a percentage is +/-2.6 percentage points for the survey. The calculation of this error was computed taking into consideration the design effects associated with stratification, weighting, and clustering.

After getting approval from Qatar University's Internal Review Board (IRB), official letters were given to the relevant schools, requesting permission to distribute the survey at their premises. Accordingly, consent forms were sent to students and their parents, confirming that taking part in the study was voluntary and that responses would be strictly confidential. Upon receipt of the signed consent forms, parent questionnaires were given to students to take home and return when completed. The latter were instructed to inform their parents about the importance of completing the survey within one week.

The study involved 1,142 parents of students enrolled in 8th, 9th, 11th and 12th grades, with a response rate of approximately 69%. We excluded observations with missing cases for the outcome variable, that is, participation in private tutoring. Overall, 1,117 cases were complete for the outcome variable. To address missing data in some of the response variables, we used Stata statistical multiple imputation employing chained equations technique (Little, Carpenter, & Lee, 2022). We then used Stata's "MI" and the "SVY" commands, with the "subpop" option to estimate means and proportions that accounted for multiple-imputation estimates and the complex design features of QES and for the focus on household groups participating and not participating in private tutoring. Table 1 below provides summary statistics for the parents that participated in the QES 2019 survey.

Of the 1,117 parents who completed the questionnaires, 355 reported participating in private tutoring. Overall, 51% of Qatari parents in the sample indicated that they participated in private tutoring, compared to only 28% of the expatriates. The mean age for the respondents in both groups is 45 years. A large majority of the parents in the sample had at least attained secondary education or higher and were employed.

Table 1: Descriptive Statistics for the Sample

	Participants	95% CI	Non-participants	95% CI
	(n = 355)		(n = 762)	
Gender				
Male	59.19%	0.50 - 0.68	63.32%	0.57 - 0.70
Female	40.81%	0.32 - 0.50	36.68%	0.30 - 0.43
Nationality				
Non Qatari	61.50%	0.47 - 0.76	81.09%	0.74 - 0.88
Qatari	38.50%	0.24 - 0.53	18.91%	0.12 - 0.26
Age	45.22	44.26 – 46.18	45.13	44.38 – 45.88
Father's education				
Below secondary	10.00%	0.23 - 0.32	12.99%	0.10 - 0.16
Secondary or post-secondary	40.63%	0.23 - 0.32	33.50%	0.28 - 0.39
Bachelor's degree or more	49.37%	0.23 - 0.32	53.51%	0.47 - 0.60
Mother's education				
Below secondary	15.02%	0.09 - 0.21	19.84%	0.15 - 0.25
Secondary or post-secondary	39.37%	0.31 - 0.48	31.27%	0.26 - 0.37
Bachelor's degree or more	45.60%	0.37 - 0.54	48.90%	0.42 - 0.55
Parent employment				
No	26.44%	0.20 - 0.33	27.37%	0.23 - 0.32
Yes	73.56%	0.67 - 0.80	72.63%	0.68 - 0.77

	Participants	95% CI	Non-participants	95% CI
Absenteeism				
No	80.27%	0.73 - 0.88	87.31%	0.84 - 0.91
Yes	19.73%	0.12 - 0.27	12.69%	0.09 - 0.16
Additional cost of education				
QAR0 – 999	26.39%	0.21 - 0.32	25.88%	0.22 - 0.29
QAR1000 – 4999	40.08%	0.34 - 0.46	49.05%	0.45 - 0.53
QAR5000 – 9999	20.03%	0.15 - 0.26	14.58%	0.11 - 0.18
QAR10000 or more	13.50%	0.10 - 0.17	10.49%	0.07 - 0.14
Grade				
8	29.08%	0.14 - 0.44	35.36%	0.21 - 0.50
9	29.70%	0.14 - 0.46	25.53%	0.12 - 0.39
11	22.73%	0.09 - 0.36	25.17%	0.11 - 0.39
12	18.49%	0.06 - 0.31	13.94%	0.04 - 0.24
School type				
Government	36.35%	0.16 - 0.57	33.13%	0.18 - 0.48
Other	63.65%	0.43 - 0.84	66.87%	0.52 - 0.82

3.2. Instrumentation

Paper-and-pencil interviewing (PAPI) was used to collect data from the parent survey. Prior to implementing the survey, each Qatar Education Study (QES) interviewer had participated in training workshops that covered the essentials of survey administration, Computer Assisted Telephone Interviewing (CATI), and the necessary protocols for conducting survey instruments. The survey includes questions on parents' demographic profile, students' performance, and parental involvement in the education of their child.

3.3. Measures

The use of private tutoring is the main dependent variable for this study's statistical analysis. In the questionnaire, parents were asked: "Does your child use private tutoring?" Responses were treated in the model as a dichotomous variable (Yes=1, No=0).

School grade was used in the model to check whether there is a statistically significant difference in participation in private tutoring in terms of students' school grade. Four school grades were used for analysis: grades 8 and 9 (preparatory schools) and grades 11 and 12 (high school).

School type was employed as an administrative variable obtained from the sampling frame and has four categories: 1) government; 2) international; 3) community; and 4) Arabic private. Only the first two

school types were used for statistical analysis because of the low number of cases in the last two. These categories were coded as 1=Government and 0=International. This variable was used to see if there is a difference in participation in private tutoring depending on the school (public or another type) the child attends. Other school types include international, community, and private Arabic schools.

Demographic variables were examined as predictors of parental use of private tutoring; these include gender, age, nationality, employment status, and the highest level of education.

Nationality: This was used in the model as a dichotomous variable (Qatari=1, non-Qatari=0). Parents were split between Qataris (38.50%) and non-Qataris (61.50%).

Gender: This was reported in the model as a dichotomous variable (female=1, male=0). Parents were split between male (59%) and female (41%).

Age: In the questionnaire, parents were asked to indicate their date of birth.

Employment Status: Parents were also asked about their current employment status and were instructed to choose one answer from a list of seven options: 1) Full-time employee; 2) Part-time employee; 3) Housewife; 4) Unemployed, seeking a job; 5) Unemployed, not seeking a job; 6) Retired; and 7) Unable to work. The list also included an "Other" option (with an open-ended, "please specify" space) and an "I do not know" option.

Highest Level of Education: In the questionnaire, parents were asked to indicate their highest level of education: 1) Never attended school; 2) Elementary; 3) Preparatory; 4) Vocational; 5) Secondary; 6) Post-secondary (Diploma); 7) Bachelor's degree; 8) Master's degree; and 9) Ph.D. The list also comprised an "Other" option (with an open-ended, "please specify" space) and an "I do not know" option.

Child Absenteeism: Elsewhere in the questionnaire, parents were asked: "In a typical week, how many days on average does your child miss school (absent from school)?" Parents were required to select one answer from a list of six options: 1) Never; 2) One day; 3) Two days; 4) Three days; 5) Four days; and 6) All week. The list further included an "Other" option (with an open-ended, "please specify" space) and an "I do not know" option.

Cost of Education-Related Activities: Parents were also asked: "Apart from the school tuition, private tutoring charges and other expenses at school, how much on average (in Qatari Riyals) do you spend per term on your child's education-related activities (such as stationary, costumes for school events, etc.)?" Six response options were provided, including 1) None; 2) Less than QR 1,000; 3) QR 1,000 – Less than QR 5,000; 4) QR 5,000 – Less than QR 10,000; 5) QR 10,000 – Less than QR 15,000; and 6) QR 15,000 or more. An "Other" option was also included, together with an open-ended, "please specify" space and an "I do not know" option.

3.4. Mode of analysis

Given that the dependent variable in this study is a binary variable, that is, to participate or to not participate in private tutoring, we used the binary probit model to analyze the determinants of private

¹ $1 \text{ USD} = QR \ 3.65 \ (1 \ QR = 0.274725 \ USD)$

tutoring decisions. Additionally, we included a set of independent variables drawn from the relevant literature. The binary probit model enables the estimation of a conditional or response probability with respect to a set of explanatory variables. The structural model expressing participation in private tutoring is as follows:

$$y_i^* = x_i \beta + \varepsilon_i$$

 y_i^* = the respondent's latent measure of satisfaction or utility derived from private tutoring,

x =a vector of explanatory variables,

 β = a vector of estimated coefficients.

 $\varepsilon = a$ random error term.

Assuming that the random error term has a normal distribution, the maximum likelihood estimation method is used to estimate coefficients following the binary probit model as follows:

$$P(y_i = 1) = \Phi(x_i \beta)$$

 Φ = the standard normal distribution function.

We transformed the coefficients of the binary probit model to generate the marginal effects, that is, the effects that explanatory variables have on the probability of participating in private tutoring. As is shown in Table 2 below, only marginal effects of the four different specifications are presented. The marginal effects of the binary probit can be expressed as follows:

$$\frac{\partial P(y_i=1)}{\partial x_{ik}} = \Phi(x_i \beta) \beta_k$$

Column 1 in Table 2 demonstrates marginal effects for all explanatory variables. All analyses were conducted using Stata.

(1) (2) (3) (4) Variables Marginal effects Marginal effects Marginal effects Marginal effects nationality 0.263*** 0.265*** 0.260*** 0.266*** (0.0374)(0.0376)(0.0377)(0.0379)-0.0356 -0.0303 -0.0304 male -0.0225 (0.0350)(0.0358)(0.0357)(0.0374)employedhh 0.0381 0.0388 0.0292 0.0287 (0.0420)(0.0421)(0.0420)(0.0424)-2.64e-05 -0.000322 0.000195 -0.000393 age (0.00244)(0.00240)(0.00244)(0.00238)

Table 2: Estimated Marginal Effects of the Probit Model

	(1)	(2)	(3)	(4)
1.costaddedu	0.0467	0.0458	0.0472	0.0457
	(0.0333)	(0.0333)	(0.0332)	(0.0332)
3.costaddedu	0.0809*	0.0837*	0.0786	0.0843*
	(0.0452)	(0.0447)	(0.0474)	(0.0469)
4.costaddedu	0.0781	0.0757	0.0789	0.0751
	(0.0485)	(0.0488)	(0.0488)	(0.0487)
absenteeism	0.101**	0.101**	0.102**	0.102**
	(0.0456)	(0.0452)	(0.0462)	(0.0451)
2.maleedu	0.0526		0.0812	
	(0.0545)		(0.0538)	
3.maleedu	0.0369		0.0400	
	(0.0539)		(0.0491)	
2.femaleedu	0.0798	0.0962*		
	(0.0577)	(0.0560)		
3.femaleedu	0.00102	0.0125		
	(0.0470)	(0.0428)		
2.grader	0.0734	0.0748	0.0803*	0.0856*
	(0.0449)	(0.0450)	(0.0437)	(0.0438)
3.grader	0.0272	0.0277	0.0305	0.0334
	(0.0763)	(0.0762)	(0.0778)	(0.0784)
4.grader	0.106	0.108	0.106	0.110
	(0.0923)	(0.0916)	(0.0928)	(0.0919)
intschool	0.136**	0.136**	0.132*	0.130*
	(0.0652)	(0.0654)	(0.0668)	(0.0677)
Observations	1,117	1,117	1,117	1,117

Standard errors in parentheses

4. Results

Our study's results show that nationality is positively associated with the use of private tutoring, for Qatari parents appear to be 26% more likely to avail private tutoring in comparison to their non-Qatari counterparts. This result holds across all four specifications in the model (see Table 2). Results

^{***} p<0.01, ** p<0.05, * p<0.1

further show that the age of the parent is statistically insignificant with a positive sign, which shows that parental age does not affect the use of private tutoring.

Contrary to our expectations, however, although the employment status of the parent is positively associated with private tutoring usage, no statistically significant results were observed. While participation in private tutoring is a costly exercise, employment and family earnings are likely to increase participation in private tutoring. However, in this study, our results suggest that the employment status of the father or mother is not associated with participation in private tutoring.

Parents' education level appears to be associated with their participation in private tutoring. We tested for the effect of father's and mother's education level using different specifications, as is shown in Table 2 above. In the full model – i.e. column 1 – both the father's and the mother's levels of education are included in the model. The results show that neither of the two categorical variables is statistically significant. To avoid multicollinearity, the associations of the education level and the dependent variable were tested in a series of separate equations. The second specification revealed a statistically significant association between mother's education and the use of private tutoring. On the contrary, no association was detected between the father's level of education and participation in private tutoring. Additionally, moving from less than secondary schooling to secondary or post-secondary level of education is associated with a 10% increase in the likelihood of participation in private tutoring.

The results also indicated a positive and statistically significant association between the child's grade level and participation in private tutoring. As the results in equations 3 and 4 revealed, the mother's level of education is an important predictor of private tutoring. One interpretation of this finding could be the association between parental education and the child's schooling. Highly educated parents are more likely to encourage their children to attain higher levels of education. As a result, including parental education, especially the mother's education, causes multicollinearity. After controlling for other factors, excluding parental education, parents with students in the 9th grade are 8% more likely to participate in private tutoring than the base category, that is, 8th grade. Nevertheless, this association is not very strong. We also tested the hypothesis that grades 9, 11 and 12 have no effect on the use of private tutoring. The F-test is statistically significant, which confirms the positive association between the child's grade level and participation in private tutoring.

The likelihood of participating in private tutoring is also strongly and positively associated with students' absenteeism. Enrollment in an international private school is associated with a 13% likelihood of participating in private tutoring. This finding is in line with Marshall and Fukao (2019) who argue that private tutoring influences full-time schooling. In this case, our results may suggest that students participate in private tutoring to either catch up with other students or to avail specific benefits of private tutoring such as individualized learning.

As was expected, our results revealed that the variable of the additional costs of education is positively and statistically associated with participation in private tutoring, suggesting that parents of international school students are 10 percent more likely to invest in private tutoring. The data also indicates a 20-percentage point increase in the probability of public school parents to invest in low-cost private tutoring. In other words, households that spend more on additional schooling activities are more likely to spend money on private tutoring. This finding could suggest that households that invest more

in other education-related activities as a way of giving their children an advantage tend to be more likely to spend money on private tutoring as well.

Attending an international private school appears to be positively and statistically correlated with private tutoring usage. The results show that parents whose children are enrolled in an international private school are 13% more likely to hire a private tutor. In general, because participation in public education is affordable, compared to private schools, attending international private schools increases household expenditure on education. Given that the budget restrains household spending, a question that begs itself is: do these findings suggest that parents facing the high costs of international private school fees can afford the additional costs of supplementary private tutoring? Here, it needs to be noted that some households in Qatar receive education subsidies from their employers, implying that they receive assistance in paying the full cost of education.

5. Discussion

This section provides a discussion of the results derived from our study and delves further into salient factors that emerged as significantly correlated to parental use of private tutoring. The present study's results are best viewed through the prism of political science theorist Albert Hirschman's (1970) exit, voice, and loyalty, which help to gain a better understanding of the role of private tutoring in Qatar. Hirschman's argument serves to explain some of this study's findings, for the basic options available to an individual are either "exit" (i.e., using a different provider) or "voice" (i.e., participation). His theory posits that in a school setting, parents can use either an exit or a voice strategy to induce organizational improvement.

In this study, parents' use of private tutoring can be viewed as an exit strategy because they are opting out of using voice (i.e., expressing their concerns to school leadership) to improve the quality of education. Some households perhaps use exit as a strategy to complement regular mainstream education or compensate for lack of individualised attention in the classroom. Alternatively, households may exercise their voice as an expression of discontent with the quality of education their children receive in regular mainstream schools.

5.1. Mother's education

The results presented above reveal that parents' education level, particularly the mother's, is an important factor that shapes private tutoring usage in Qatar. These results are consistent with research findings confirming a strong relationship between the parent's level of education and the likelihood they will hire a private tutor for their child (Liu, 2019; Otto & Karbach, 2019). While there is no correlation between the father's education and the demand for private tutoring, the mother's level of education is associated with the use of a private tutor. This could be interpreted as implying that highly educated mothers in Qatar are perhaps in full time employment and thus have little time to follow up with their child's school and to advocate for higher standards of schooling. Therefore, private tutoring may be perceived as a useful tool that educated Qatari mothers employ to counterbalance their inability to attend to their child's educational needs and engage more actively with her/his schooling.

These findings further echo past and recent work done by Hefnawi and Jeynes (2022), who suggest that parental participation in the child's schooling in Arab societies is very limited. More specifically, other studies such as Barnes and others' (2016) note that parents' busy schedules and time constraints can affect and even impede their involvement in their children's education. Indeed, there is evidence to suggest that parents may seek to compensate for their lack of engagement by investing significant amounts of time and money in private tutoring, which they may regard as an alternate form of involvement (Otto & Karbach, 2019; Urhahne, 2019).

5.2. Students' grade level

Our study's results further suggest that parents with a child in upper grades at school are more likely to invest in private tutoring in Qatar, compared to those with children in lower grade levels. In line with findings of studies conducted by Bray (2021) and Kim and Jung (2019), it may be argued that private tutoring is most common among students in the final stages of secondary school, perhaps signifying that the use of private tutor among upper grade students who are about to exit high school is indicative of their willingness to perform well in high stakes standardised exams. Another interpretation is that parents' use of a private tutor and their investment in their child's educational journey at this critical juncture could be attributed to a desire to enhance their college-going child's chances of success in securing a place at an elite, more selective college or university (Exley, 2020; Yung, 2019). Available research has shown that expecting or planning to enroll in a prominent institution of higher education is a salient determinant factor that influences parents' decision to hire a private tutor (Zhang, 2020).

5.3. Cost of education-related activities

Additional education charges also emerged as a factor shaping private tutoring usage. While our results indicate that parents spend extra money on private tutoring, the trends are different for those with a child in international or public (and other) schools. Households with a child in an international school tend to be ready to go an extra mile and spend more money on private tutoring. Interestingly, parents with a child in international schools already bear the burden of paying school fees and other school-related materials, and activities. While international schools are a favorite – and sometimes the only – option for expatriate families, many are increasingly struggling to meet rising school fees in Qatar, particularly those who have to pay full or a significant part of the fees. Families with children enrolled in these schools are expected to also bear the additional costs of transportation, uniforms, laptops, health insurance, books, bus fees and daily meals.

By contrast, Qatari citizens often opt for public schools that are fully financed by the government. In Qatar, public education is provided at no cost to national and a limited number of Arab students, in addition to free uniforms, textbooks, and transportation. Qatari families generally exhibit a strong liking for public schools, which they prefer their children to go to because they are gender-segregated and place considerable emphasis on Arabic and Islamic values and principles. Demonstrably, Qataris' preference of public schools in Qatar would need to be understood in the light of the local society's firmly rooted desire to preserve the country's Arabic and Islamic identity as well as people's conservative customs, traditions, and beliefs (Golkowska, 2014, 2017; Lee, 2021).

Research demonstrates that parents' income often determines the school choices available to them and that earnings are an important factor that determines parental choices of a private or public school for their child (Erickson, 2017). Because Qatar has the highest standard of living in the world (McGann, 2019) and since the government provides free public schooling, affordability of tuition fees may not be a real issue among Qataris. Therefore, the finding that public-school parents invest in low-cost private tutoring needs to be interpreted as referring to non-Qataris with lower incomes. Research by Choudhury (2019), Kemerer (2021), and Mousumi and Kusakabe (2017) indicates that whereas affluent families can afford the luxury of enrolling their children in private schools, low-income households are left with limited choices and are less likely to attend private schools due to low family income.

5.4. School type

Looking at the type of school attended, the results concluded from our study indicate that parents with children in private schools tend to participate in private tutoring more than those with children in public or other schools do. Could investment in private tutoring be a measure taken by parents to meet the academic standards and requirements of their child's school in Qatar? While no documented research is available to confirm this claim, anecdotal evidence points to the pressure from peers and school demands as factors that influence families' use of a private tutor. International schools in Qatar, and the larger Arabian Gulf region for that matter, are generally viewed as competitive and demanding, and often hold parents partly accountable for their children's education. These schools also have a rigorous reputation, which likely contributes to their success in attracting highly motivated students. Moreover, as is stated above, parents may hire a private tutor to further their child's chances of success and to secure a seat in selective and elite institutions of higher education (Exley, 2020; Yung, 2019).

5.5. School absenteeism

The child's school absenteeism also emerged as an important factor that shapes parental use of private tutoring. This finding could be taken to mean that the child's absences from school may have driven parents to seek a private tutor outside their child's school in order to counterbalance the classes their child misses. Results from a previous large-scale study conducted by the Social and Economic Survey Research Institute (SESRI) in 2015 in Qatar showed a strong correlation between higher rates of participation in private tutoring and student failure to attend school (SESRI, 2016). This result is also consistent with findings from other documented research confirming that concerns over the child's academic performance at school influence parental decisions to hire a private tutor to provide instruction for their child (Guill, Lüdtke, & Köller, 2020; Seo, 2018).

At the same time, one could further argue that taking private tutoring may prompt students to miss classes when seen as a leverage that allows them to catch up and make up for missed classes. Recent research by Bhorkar and Bray (2018) and Zhang and Bray (2017) reveals that tutoring outside formal schooling undermines students' regular school attendance because it encourages them to miss classes if they feel there is a substitute to their teacher. Findings from a study conducted by Guill and Bos (2014)

reveal that bored and unmotivated students are also likely to skip school as long as they have access to a private tutor.

Viewed through Hirschman's exit, voice, and loyalty framework, it may be argued that parents resort to private tutoring as an "exit" strategy. Combined, our study's findings could be understood as implying parents' perceived dissatisfaction with the quality of formal education, coupled with the perceived advantages conferred by pursuing private tutoring as a form of educational support for their children. Similarly, parents' decisions to hire private tutors may signify their use of "voice" to communicate their concerns about mainstream education delivery and assert the need for improvement to address the academic needs of their children. Looking closely at our findings in their totality reveals that a segment of parents do not participate in the private tutoring frenzy. Hirschman's "loyalty" concept helps to clarify why these parents are committed to their main education provider in Qatar, that is, the Ministry of Education and Higher Education. Qatari parents' preference of public schools in Qatar may account for their loyalty and the value they attach to their own and their childrens' identity as Muslims and Arabs.

6. Conclusion

Over the years, Qatar has striven to reform its education sector to empower stakeholder voice through decentralization and a market-driven approach to the provision of schooling. However, the outcomes of recent reforms have not been very successful in terms of enhancing the quality of formal (mainstream) education. Mounting evidence points to increasing parental reliance on private tutors to engage with school improvement through voice. Even with this drive to rely on private tutors, there is still a mismatch between students' literacy and numeracy, research and critical understanding, and university expectations. Could these findings suggest decreasing trust in Qatar's public education and does this drive people's perceived need for tutors? Future research is required to explore this important area.

At a time when Qatar strives to overhaul its K-12 and higher education, efforts taken by successive governments continue to be weakened by the presence of a prevalent illegal 'shadow education' that is sustained by a far-flung desire for private tutors. As in many other world regions, Qatar is home to unregulated private tutors that engage in private, non-contractual tutoring, often in students' and, to a lesser extent, tutors' homes (SESRI, 2016). Our study does not yield any evidence that confirms private tutoring usage does or doesn't contribute to a student's improved educational attainment. Previous research has examined how families turn to private tutoring when mainstream public education does not meet their expectations, but the findings remain inconclusive.

The implications of this present study are two-fold: policy-level issues for the government of Qatar and potential directions for future research locally, regionally or internationally. The study's findings may inform educational policy and decision-making. Within the context of Qatar, we observed an important trend among households to use a private tutor based on a perceived advantage conferred by the use of tutoring outside mainstream schooling. The onus, therefore, rests on decision makers to devise and implement policies regulating the use of private tutoring while also assisting and encouraging schools and stakeholders to place more emphasis on the quality of formal education. At the same time, school

children and their parents should also be encouraged to valorize mainstream education delivery. The findings can also be useful for researchers in other countries who may be interested in exploring the topic, to learn more about the dynamics that affect this phenomenon in non-Western settings.

Existing research has shown that private tutoring can improve students' academic performance (Sun et al., 2020; Zhang et al., 2021) and may facilitate student access to higher education institutions (Hajar & Abenova, 2021). Nevertheless, this research has largely ignored salient differences that exist between students who take private tuition and other students. One of the limitations of this study is its sole focus on parental views. Including students' opinions on the topic would provide an alternative and more informed perspective. Future research is needed to investigate in more detail the personal attitudes and motivations and other relevant context-specific influences likely to shape private tutoring usage, especially in other countries of the MENA region. Future work is also needed to broaden the focus to incorporate a wide spectrum of students enrolled in all types of schools in Qatar and not simply Qatari students. Overall, private tutoring remains under-researched, particularly regarding related students' and parents' personal motivations and other context-specific factors.

References

- Alam, M. B., & Zhu, Z. (2022). Private tutoring in Bangladesh: Evolution, expansion, and policy responses. *International Journal of Comparative Education and Development*, 24(1), 20-36.
- Barnes, J. K., Guin, A., Allen, K., & Jolly, C. (2016). Engaging parents in early childhood education: Perspectives of childcare providers. *Family and Consumer Sciences Research Journal*, 44(4), 360-374. https://doi.org/10.1111/fcsr.12164
- Bhorkar, S., & Bray, M. (2018). The expansion and roles of private tutoring in India: From supplementation to supplantation. *International Journal of Educational Development*, 62, 148-156. https://doi.org/10.1016/j.ijedudev.2018.03.003
- Bray, M. (2007). *The shadow education system: Private tutoring and its implications for planners* (2nd ed.). UNE-SCO, International Institute for Educational Planning.
- https://www.researchgate.net/publication/44839572_The_Shadow_education_system_private_tutoring_and_its_implications for planners
- —. (2011). The challenge of shadow education: Private tutoring and its implications for policy makers in the European Union. European Commission. http://www.nesse.fr/nesse/activities/reports/activities/reports/the-challenge-of-shadow-education-1
- —. (2021). Shadow education in Europe: Growing prevalence, underlying forces, and policy implications. *ECNU Review of Education*, 4(3), 442-475. DOI: 10.1177/2096531119890142
- Bray, M., & Hajar, A. (2022). Shadow education in the Middle East: Private supplementary tutoring and its policy implications. Taylor & Francis.
- Brehm, W. C., & Silova, I. (2014). Hidden privatization of public education in Cambodia: Equity implications of private tutoring. *Journal for Educational Research Online*, 6(1), 94–116. https://www.researchgate.net/publication/264971897_Hidden_privatization_of_public_education_in_Cambodia_Equity_implications_of_private_tutoring
- Chih-Hao, C. (2019). Effects of private tutoring on English performance: Evidence from senior high students in Taiwan. *International Journal of Educational Development*, 68, 80-87. https://doi.org/10.1016/j.ijedudev.2019.05.003
- Choudhury, P. K. (2019). Parental choice for schools in the changing context of the state and market in India. In S. Babu (Ed.), *Education and the public sphere* (pp. 109-129). London: Routledge.
- Entrich, S. R. (2020a). Gender-and SES-specific disparities in shadow education: Compensation for boys, status upgrade for girls? Evidence from the German Life Study. *Orbis Scholae*, *14*(2), 13-38.
- —. (2020b). Worldwide shadow education and social inequality: Explaining differences in the socioeconomic gap in access to shadow education across 63 societies. *International Journal of Comparative Sociology*, 61(6), 441-475. https://doi.org/10.1177/00207152209878
- Exley, S. (2020). Selective schooling and its relationship to private tutoring: The case of South Korea. *Comparative Education*, 56(2), 218-235. https://doi.org/10.1080/03050068.2019.1687230
- Erickson, H. (2017). How do parents choose schools, and what schools do they choose? A literature review of private school choice programs in the United States. *Journal of School Choice*, *11*(4), 491-506. DOI:10.1080/15582159.2017.1395618

- Ghosh, P., & Bray, M. (2020). School systems as breeding grounds for shadow education: Factors contributing to private supplementary tutoring in West Bengal, India. *European Journal of Education*, 55(3), 342-360. https://doi.org/10.1111/ejed.12412
- Golkowska, K. (2014). Arab women in the Gulf and the narrative of change: The case of Qatar. *International Studies: Interdisciplinary Political and Cultural Journal (IS)*, 16(1), 51-64.
- —. (2017). Qatari women navigating gendered space. Social Sciences, 6(4), 123.
- Guill, K., & Bos, W. (2014). Effectiveness of private tutoring in mathematics with regard to subjective and objective indicators of academic achievement. Evidence from a German secondary school sample. *Journal for Educational Research Online*, 6(1), 34–67. https://doi.org/10.25656/01:8840
- Guill, K., & Lintorf, K. (2019). Private tutoring when stakes are high: Insights from the transition from primary to secondary school in Germany. *International Journal of Educational Development*, 65, 172-182. https://doi.org/10.1016/j.ijedudev.2018.08.001
- Guill, K., Lüdtke, O., & Köller, O. (2020). Assessing the instructional quality of private tutoring and its effects on student outcomes: Analyses from the German National Educational Panel Study. *British Journal of Educational Psychology*, 90(2), 282-300. https://doi.org/10.1111/bjep.12281
- Guill, K., Lüdtke, O., & Schwanenberg, J. (2020). A two-level study of predictors of private tutoring attendance at the beginning of secondary schooling in Germany: The role of individual learning support in the classroom. *British Educational Research Journal*, 46(2), 437-457. https://doi.org/10.1002/berj.3586
- Gupta, A. (2022). Social legitimacy of private tutoring: An investigation of institutional and affective educational practices in India. *Discourse: Studies in the Cultural Politics of Education*, 43(4), 571-584. https://doi.org/1 0.1080/01596306.2020.1868978
- Hajar, A., & Abenova, S. (2021). The role of private tutoring in admission to higher education: Evidence from a highly selective university in Kazakhstan. *Hungarian Educational Research Journal*, 11(2), 124-142. https://doi.org/10.1556/063.2021.00001
- Hefnawi, A., & Jeynes, W. (2022). Parental involvement in the UAE and in other moderate Arab states. In W. Jeynes (Ed.), *Relational aspects of parental involvement to support educational outcomes: Parental communication, expectations, and participation for student success* (pp. 139-158). New York: Routledge.
- Hirschman, A. O. (1970). Exit, voice, and loyalty: Responses to decline in firms, organizations, and states. Harvard University Press.
- Holloway, S. L., & Pimlott-Wilson, H. (2020). Marketising private tuition: Representations of tutors' competence, entrepreneurial opportunities and service legitimation in home tutoring business manuals. *British Educational Research Journal*, 46(1), 205-221. https://doi.org/10.1002/berj.3575
- Holmes Erickson, H. (2017). How do parents choose schools, and what schools do they choose? A literature review of private school choice programs in the United States. *Journal of School Choice*, *11*(4), 491–506. https://doi.org/10.1080/15582159.2017.1395618
- Hultberg, P. T., Calonge, D. S., & Choi, T. (2021). Costs and benefits of private tutoring programs: The South Korean case. *International Journal of Social Economics*, 48(6), 862-877. https://doi.org/10.1108/IJSE-12-2019-0722

- Kemerer, J. L. (2021). Parent Rights, School Choice, and Equality of Opportunity. In School Choice Tradeoffs (pp. 98-133). University of Texas Press.
- Kim, Y. C., & Jung, J. H. (2019). Shadow education as worldwide curriculum studies. Cham, Switzerland: Springer.
- Kirby, P. (2016). *Shadow Schooling: Private tuition and social mobility in the UK*. The Sutton Trust. https://www.suttontrust.com/our-research/shadowschooling-private-tuition-social-mobility/
- Lambert, K., & Spinath, B. (2014). Do we need a special intervention program for children with mathematical learning disabilities or is private tutoring sufficient? *Journal for Educational Research Online*, 6(1), 68–93. https://www.pedocs.de/volltexte/2014/8841/pdf/JERO_2014_1_Lambert_Spinath_Do_we_need_a_special intervention program.pdf
- Lee, S. S. (2021). A precarious balancing act: globalization, political legitimacy, and higher education expansion in Qatar and the UAE. *Contemporary Arab Affairs*, 14(1), 113-133.
- Little, R. J., Carpenter, J. R., & Lee, K. J. (2022). A comparison of three popular methods for handling missing data: Complete-case analysis, inverse probability weighting, and multiple imputation. *Sociological Methods & Research*, 1-31. https://doi.org/10.1177/00491241221113873
- Liu, J. (2019). A structural equation modeling analysis of parental factors underlying the demand for private supplementary tutoring in China. ECNU Review of Education, 2(1), 7-24. DOI:10.1177/2096531119840856
- Liu, J., & Bray, M. (2020). Evolving micro-level processes of demand for private supplementary tutoring: Patterns and implications at primary and lower secondary levels in China. *Educational Studies*, 46(2), 170-187. https://doi.org/10.1080/03055698.2018.1555452
- Marshall, J. H., & Fukao, T. (2019). Shadow education and inequality in lower secondary schooling in Cambodia: Understanding the dynamics of private tutoring participation and provision. *Comparative Education Review*, 63(1), 98-120.
- McGann J.G. (2019) Qatar: An overview. In J. McGann (Eds.), *Think tanks, foreign policy and the emerging powers* (pp. 377-381). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-60312-4 26
- Mohamed, S. (2017, January 24). Ministry gets tough against private tutors: Common summer vacation for all schools. *The Peninsula*. https://www.thepeninsulaqatar.com/article/24/01/2017/Ministry-gets-tough-against-private-tutors-Common-summer-vacation-for-all-schools
- Mousumi, M. A., & Kusakabe, T. (2017). The dilemmas of school choice: Do parents really 'choose' low-fee private schools in Delhi, India? *Compare: A Journal of Comparative and International Education*, 49(2), 230-248. https://doi.org/10.1080/03057925.2017.1401451
- Otto, B., & Karbach, J. (2019). The effects of private tutoring on students' perception of their parents' academic involvement and the quality of their parent-child relationship. *Educational Psychology*, 39(7), 923-940. https://doi.org/10.1080/01443410.2019.1610725
- Ristow, B. (2019). Mobilizing resistance against the shadow economies of global private tutoring. In *Neoliberalism and Academic Repression* (pp. 107-122). Brill. https://doi.org/10.1163/9789004415539_008
- Rocha, V., & Hamed, D. S. (2018). *Parents' perspectives on paid private tutoring in the United Arab Emirates*. Regional center for Educational Planning.
- https://rcepunesco.ae/en/KnowledgeCorner/ReportsandStudies/ReportsandStudies/july-26-2018.pdf

- Sellami, A. & Le Trung, K. (2020). Predictors of parental use of private tutoring in Qatar. *International Journal of Humanities Education*, 18(2), 17-36. DOI: 10.18848/2327-0063/CGP/v18i02/17-36
- Seo, E. H. (2018). Private tutoring and academic achievement: Self-study as a mediator. *Social Behavior and Personality: An international journal*, 46(5), 823-830. https://doi.org/10.2224/sbp.6689
- SESRI (the Social and Economic Survey Research Institute). (2016). *Qatar Education Study 2015: Students' motivation and parental participation*. Qatar: SESRI, Qatar University.
- $http://sesri.qu.edu.qa/static_file/qu/research/SESRI/documents/Publications/16/Students'\%20Motivation\%20 and \%20Parental\%20Participation\%20Report\%20AR.pdf$
- Shih, Y. P., & Yi, C. C. (2014). Cultivating the difference: Social class, parental values, cultural capital and children's after-school activities in Taiwan. *Journal of Comparative Family Studies*, 45(1), 55-75. https://doi.org/10.3138/jcfs.45.1.55
- Sieverding, M., Krafft, C., & Elbadawy, A. (2019). An exploration of the drivers of private tutoring in Egypt. *Comparative Education Review*, 63(4), 562-590.
- Sun, L., Shafiq, M. N., McClure, M., & Guo, S. (2020). Are there educational and psychological benefits from private supplementary tutoring in Mainland China? Evidence from the China Education Panel Survey, 2013–15. *International Journal of Educational Development*, 72, 102144. https://doi.org/10.1016/j. ijedudev.2019.102144
- Tan, C. (2017). Private supplementary tutoring and parentocracy in Singapore. *Interchange*, 48(4), 315-329. https://doi.org/10.1007/s10780-017-9303-4
- —. (2022). Private tutoring and the subjective rationalities of parents: The experiences in South Korea and Singapore. *Asian Education and Development Studies*, 11(3), 464-474. https://doi.org/10.1108/AEDS-08-2020-0183
- Urhahne, D. (2019). Teacher influences and parental involvement. *Educational Psychology*, 39(7), 859-861. https://doi.org/10.1080/01443410.2019.1642630
- Yung, K. W. (2019). Exploring the L2 selves of senior secondary students in English private tutoring in Hong Kong. *System*, 80, 120-133. https://doi.org/10.1016/j.system.2018.11.003
- Yung, K. W., & Bray, M. (2017). Shadow education: Features, expansion and implications. In T. K. C. Tse & M. Lee (Eds.), Making sense of education in post-handover Hong Kong: Achievements and challenges (pp. 95-111). Routledge. https://doi.org/10.4324/9781315694375
- Zhang, W. (2020). Shadow education in the service of tiger parenting: Strategies used by middle-class families in China. *European Journal of Education*, *55*(3), 388-404.
- Zhang, W., & Bray, M. (2017). Micro-neoliberalism in China: Public-private interactions at the confluence of mainstream and shadow education. *Journal of Education Policy*, 32(1), 63-81. https://doi.org/10.1080/0268 0939.2016.1219769
- —. (2018). Equalising schooling, unequalising private supplementary tutoring: Access and tracking through shadow education in China. *Oxford Review of Education*, 44(2), 221-238. https://doi.org/10.1080/0305498 5.2017.1389710
- —. (2020). Comparative research on shadow education: Achievements, challenges, and the agenda ahead. *European Journal of Education*, *55*(3), 322-341. https://doi.org/10.1111/ejed.12413

- Zhang, W., & Yamato, Y. (2018). Shadow education in East Asia: Entrenched but evolving private supplementary tutoring. In K.J. Kennedy & J.C. Lee (Eds.), *Routledge international handbook of schools and schooling in Asia* (pp. 323-332). London: Routledge.
- Zhang, Y., Dang, Y., He, Y., Ma, X., & Wang, L. (2021). Is private supplementary tutoring effective? A longitudinally detailed analysis of private tutoring quality in China. *Asia Pacific Education Review*, 22, 239-259. https://doi.org/10.1007/s12564-021-09671-3

Final declarations:

- The authors declare that they got the required voluntary human participants consent to participate in the study as well as the necessary institutional approvals.
- The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.

تصر يحات ختامية:

- يصرح المؤلف/ المؤلفون بالحصول على موافقة الأشخاص المتطوعين للمشاركة في الدراسة وعلى الموافقات المؤسسية اللازمة.
 - تتوفر البيانات الناتجة و/ أو المحلَّلة المتصلة بهذه الدراسة من المؤلف المراسل عند الطلب.